SUMMER SESSION 1955

The University Record of the University of Florida

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The University Record Comprises:

The Reports of the President to the Board of Control, the Annual Catalog, the Schedules, the Bulletin of the Summer Session, and announcements of special courses of instruction.

These bulletins will be sent without charge to all persons who apply for them. The applicant should specifically state which bulletin or what information is desired. Address

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Summer 1955

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*Deceased September 25, 1954.

CALENDAR OF 1955 SUMMER SESSION

1955

May 21, Saturday	Last day for filing preliminary application for 1955 Summer Session.
June 16, Thursday	Placement tests for entering students.
June 17, 18, 20, Friday, Saturday, Monday	Registration according to appointment assigned on receipt of preliminary application.
June 21, Tuesday, 7 a.m.	Classes begin. All registration fees increased $5.00 for persons completing registration on or after this date.
June 22, Wednesday, 5 p.m.	Last time for completing registration for the summer session. No one will be permitted to start registration after 3 p.m. on this date. Last time for adding courses or changing sections.
June 24, Friday, 3:30 p.m.	Last time for submitting resignation for the summer session and receiving any refund of fees.
June 27, Monday, 12 Noon	Last time for making application at the Office of the Registrar for degree to be conferred at the end of the summer session.
July 4, Monday	Holiday. Classes suspended.
July 12, Tuesday, 4 p.m.	Last time for dropping courses without receiving a grade of E.
July 16, Saturday, 12 Noon	Last time for graduate students to apply to Department of Foreign Languages for reading knowledge examination on July 30.
July 22, Friday	Last day for candidates for degrees to be conferred at end of the summer session to complete correspondence courses.
July 25, Monday, 4 p.m.	Last time for candidates for Master's and Doctor's degrees to be conferred at the end of the summer session to file theses with the Dean of the Graduate School.
July 30, Saturday, 8-12 a.m.	Foreign language reading knowledge examination for graduate students, Room 18, Anderson Hall.
August 9, Tuesday, 7 a.m.	Final Examination period begins. First semester registration begins for students enrolled in the summer session.

August 11, Thursday, 4 p.m.	Grades for all candidates for degrees to be conferred at the end of the summer session are due in the Office of the Registrar (special lists are sent to the faculty for these reports).
August 12, Friday	Faculty meetings, at times announced by the deans, to pass upon candidates for degrees.
August 13, Saturday, 12 Noon	All grades for the summer session due in the Office of the Registrar.
August 13, Saturday, 8 p.m.	Summer Commencement Convocation.

ADMISSIONS

PRELIMINARY APPLICATION

All persons planning to attend the 1955 Summer Session, whether or not they have previously attended the University, must file the preliminary application form to be considered. The preliminary application may be obtained by writing to Office of the Regsistrar. No applicant can be assured that his admission to the 1955 Summer Session will be considered unless the preliminary application has been received at the Office of the Registrar on or before Saturday, May 21, 1955. Upon receipt of the preliminary application, the applicant will be notified of the additional information (if any) that must be submitted. This additional information must be in the Office of the Registrar on or before June 1, 1955.

UNCLASSIFIED STUDENTS

For the summer session only, the University of Florida provides a category for those persons who may wish to take college courses and:

a. transfer back to the institution they regularly attend in the winter session;
b. meet certain specific certification requirements;
c. are (in the case of those who have previously attended college) unable to obtain complete transcripts from all schools previously attended in time to clear as regular students.

Persons from the groups defined above may enroll as unclassified students provided they obtain a statement of honorable dismissal (eligibility to return) from the institution they last attended. Forms for this purpose may be obtained upon request from the Office of the Registrar.

It is possible, if the student later files all necessary credentials and meets all the requirements for registration as a regular student, for credit earned during one term as an unclassified student to be counted toward a degree program at the University of Florida. Under no circumstances will credit for more than one term in an unclassified status be applied toward any degree conferred by the University. Thus, persons that have been registered as unclassified in a previous summer session should complete the requirements for admission as regular students before attending subsequent summer sessions if they anticipate completing work for a degree at the University of Florida.

Students entering the University after high school graduation and prior to college attendance at any other institution are never admitted as unclassified students and must qualify for admission as regular students as described below.

REGULAR STUDENTS

Persons who are planning to enter the University of Florida for the first time as regular students will be considered for admission as follows:

1. If the student is entering the University from high school and has not attended college, he will be considered for admission as a freshman to the University College.
2. If the student is transferring to the University from another college or university and is presenting less than 64 semester hours of acceptable col-

lege credit for advanced standing, he will be considered for admission to the University College.

3. If the student is transferring to the University from another college or university and is presenting 64 semester hours or more of acceptable college credit as advanced standing, he will be considered for admission to the Upper Division school or college of his choice provided his record indicates the completion of college work in the Social Sciences, the Physical Sciences, English, the Humanities, and the Biological Sciences, plus the required pre-professional courses of the school or college of his choice.

4. If the student wishes to pursue graduate studies and has been graduated from a standard college or university, he will be considered for admission to the Graduate Division.

SPECIFIC REQUIREMENTS FOR ADMISSION

REQUIREMENTS FOR ADMISSION FOR REGULAR STUDENTS

A. For students who have never attended college:

1. *Graduation from high school.* Records show that the student who does not graduate from high school in the top half of his class rarely succeeds in college work. The University urges the prospective student to consider this fact carefully before making application. Non-Florida students will not be considered for admission if they do not meet this criterion.

2. *Satisfactory achievement in high school.* The University does not specify any high school units as required, but the general pattern of the units presented and the student's achievement will receive careful consideration. The records reveal that those students who scatter most of their choice of subjects are those who accomplish least in any of them. Therefore applicants who present a record which shows no unity or lack of essential subjects cannot be considered.

3. *Satisfactory scores on placement tests.* All applicants must take the placement tests before registering in the University College. Those applicants who did not graduate from high school in the top half of their class must take the placement tests before being admitted to the University. These are achievement tests in the fields of English, mathematics, social studies, and natural sciences. Attainments in these fields are possible without specific high school courses and are not guaranteed by the acquiring of certain high school units. *If the scores on the placement tests indicate inadequate foundation for college work, the applicant may be denied admission.*

B. For undergraduate transfer students:*

1. *Honorable Dismissal.* The student must be eligible to return to the in-

*The student who has matriculated at any college or university, regardless of the amount of time spent in attendance or credit earned, is regarded as a transfer student.

stitution last attended. Students who for any reason will not be allowed to return to the institution last attended cannot be considered for admission.

2. *An average of C or better.* The average grade for all work attempted at other institutions must be C or better. An average grade of C or better is required for graduation from the University of Florida, and one who has not maintained this average before coming to the University need not apply.

C. For the College of Law:

1. The beginning courses in Law are not offered in the Summer Session, hence students are not admitted in June unless they have completed satisfactorily at least one semester of work in an accredited law school.

2. A student wishing to transfer from another accredited law school who, at the time of beginning his study of law, qualified for admission to this College under the stated requirements for beginning students (other than the Law School Admission Test) and who has maintained a scholastic average of C or higher on all previous law school work undertaken, may apply for admission with advanced standing. Courses completed with a grade of C or higher in other accredited law schools will be accepted for credit up to but not exceeding a total of thirty hours.

3. Applicants for admission must have received before admission a 4-year baccalaureate degree from an accredited college or university, except in the case of veterans, who will be admitted after they have completed 94 hours of satisfactory work in an accredited college or university if they have maintained a scholastic average of C or higher on all work undertaken.

D. For admission to the Graduate Division:

Limitations of space and staff restrict the enrollment of graduate students. The records of applicants for graduate study are reviewed by the graduate selection committees of the various colleges and schools. In general, no student will be considered for graduate study in any unit of the University who is a graduate of a non-accredited institution.

However, graduates of accredited institutions are not guaranteed admission. In some units of the University, an undergraduate average considerably above B is required for consideration. The acceptability of the student's undergraduate record for admission to the Graduate Division will be determined on an individual basis with consideration given to the desired area of concentration.

All applications must be made to the Admissions Section of the Registrar's office in accordance with the dates set forth in the University calendar. Prospective graduate students may correspond with any University officer for advice and information but they must definitely understand that they cannot be considered for admission or permitted to register unless all of the admission forms

specified by the Admissions Section of the Registrar's office are filed in that office on or before the dates specified in the University calendar. In addition to forms required by the Admissions Section, the student must furnish a transcript from each institution previously attended. These transcripts must be transmitted by the registrar of the institution where the work was completed to the Director of Admissions at the University of Florida.

In some instances students who do not meet the quantitative or qualitative requirements for admission for graduate study may pursue a semester or a year's work classified as a senior in an attempt to meet the qualifications set by the unit of the University concerned for the program of the student's choice. Upon approval of the Graduate Council, some work (but in no case all of the work) completed during this period might be used to reduce the course requirements for a graduate degree.

ADMISSION INFORMATION FOR VETERANS

In addition to the regular requirements for admission set forth in the preceding sections and the forms incident thereto required by the University of Florida, any veteran who expects to enroll under provisions of any of the various federal laws governing education or rehabilitation training of veterans must be sure that he has cleared the necessary details with the Veterans Administration and has obtained the necessary documents from them.

For the most part, the benefits of Public Law 346 (the G. I. Bill of Rights) are not open to any who were not in training on July 25, 1951 or who have interrupted training since that time. There are some circumstances under which these benefits are open to the veteran, but each case must be cleared in advance with the Veterans Administration.

The government benefits available under Public Laws 16 and 894 (Vocational Rehabilitation Acts) for veterans who received service connected disabilities are provided for only after review of each individual case by the Veterans Administration.

Many young men and women who have had active duty in the armed forces during the period which began with the Korean conflict are eligible for educational benefits under Public Law 550. Veterans in this group are urged to begin preliminary application with the Veterans Administration well in advance of the date they expect to enter the University. Under this law the veteran receives monthly payments which cover educational expenses (fees and books) as well as subsistence. As most of the fee and book expense must be paid at the beginning of the school term it is essential that the veteran be in a position to meet these expenses as they are due which will almost always be before any remittance has been received from the government. Veterans expecting to attend college under PL 550 are urged to familiarize themselves with the requirements and restrictions relative to the benefits of this act. Officials of the Veterans Administration should be consulted on any points not clear to the student or prospective student. It is especially important that the student understand the procedures that must be followed to obtain Veterans Administration approval of original choice or any change of educational objective.

All veterans who believe they are entitled to educational benefits are urged to contact the appropriate Veterans Administration office in order that the decision may be made in their individual case. Veterans who at the time of registration do not have the necessary papers showing clear entitlement to government benefits are required to pay their own fees. If the proper clearances are subsequently presented to the Office of the Registrar, authorization for refund of fees and expenses appropriate in the individual case will be issued.

COLLEGE CREDIT FOR SERVICE TRAINING

Veterans may be entitled to credit for training and experiences obtained in the armed forces during the war in accordance with the recommendations of the American Council on Education as set forth in "A Guide to the Evaluation of Educational Experiences in the Armed Services." All veterans entering or reentering the University should consult the Assistant Director of Admissions in the Office of the Registrar. In many cases it will be helpful to the student and his dean in planning a program if this can be done in advance of registration.

EXPENSES

REGISTRATION FEES

	Three Week Term	*Eight Week Term*
Registration Fee (Florida Students)	$ 20.00	$ 45.00
Registration Fee (non-Florida Students)	55.00	145.00
Forest Ranger School Registration Fee (Florida Students)	.—*	55.00
Forest Ranger School Registration Fee (Non-Florida Students)	.—*	145.00

Fees for registration after the regular registration period are increased $5.00. There are no waivers of the increased fees for any reason.

SPECIAL FEES

Graduation Fee, Bachelor's Degree	10.00	10.00
Graduation Fee, Master's or Doctor's	20.00	20.00
Applied Music Fee	.—*	30.00
Practice Room	.—*	5.00
Instrument Rental	.—*	5.00

*Not offered.

EXAMINATION FEES

A non-refundable fee of $1, payable on the date of application, is charged each applicant for a comprehensive examination. Applications are necessary only in case the student is not currently enrolled in the course concerned.

A comprehensive examination for all entering graduate students in Education (National Teachers Examination or equivalent) is required. A fee of $7.00 is charged.

BREAKAGE FEES

Courses with laboratories in which expendable equipment is used usually require the purchase of breakage books. These books are purchased in the Cashier's Office (Student Bank). The unused coupons may be redeemed at the end of the term upon proper clearance and approval.

REFUND OF FEES

If before 3:30 p.m. on Friday of the first week of the Summer Session students for any reason wish to withdraw from the University, the fees paid, less a flat fee of $3.00, will be refunded. No refunds will be made after this date.

STUDENT BANK

Banking facilities are available for the convenience and protection of students in the Cashier's Office, Room 1, Administration Building. A service charge of seventy five cents is made on each account for the Summer Session.

LIVING EXPENSES

Meals may be obtained on campus at reasonable cost. Cafeteria service is available at several campus locations operated by the Food Service Division of the University. Several restaurants and cafeterias are located adjacent to the campus. Lodging is available in University housing facilities, in private rooming houses off-campus, and in fraternity and sorority houses.

STUDENT LIFE—SERVICES, FACILITIES, ACTIVITIES REGULATIONS

OFFICE OF THE DEAN OF STUDENT PERSONNEL

The Dean of Student Personnel coordinates the counseling and service activities which are available to aid the student in solving personal and educational problems and to help him in selecting a balanced program of social and recreational activities.

OFFICE OF THE DEAN OF MEN

The Dean of Men as a counselor to men students, is interested in the total life of the student, including his academic, financial, social, and recreation activities. In cooperation with the Dean of Women, his office serves as a clearing house for all non-classroom activities. The Dean of Men serves as an adviser to student self-government so that these activities may provide training in citizenship and leadership. He cooperates with the Director of Housing in providing counseling for men who live in University housing facilities.

OFFICE OF THE DEAN OF WOMEN

The Dean of Women has broad responsibilities for the welfare of women students. She serves as a counselor to students on a variety of problems and interests including personal, academic, financial and social.

In cooperation with the Dean of Men and the Adviser to Student Organizations she serves as an adviser to student government and other student organizations.

The Dean of Women in cooperation with the Director of Housing, acts in an administrative, supervisory, and counseling capacity with relation to the University residence halls and women's fraternity houses.

OFFICE OF THE DIRECTOR OF HOUSING

The Office of the Director of Housing coordinates the residence halls and Flavet programs and operations and compiles off-campus housing information and listings. See section on "Housing" for details.

OFFICE OF THE ADVISER TO FOREIGN STUDENTS

The Adviser to Foreign Students is the coordinator of arrangements for all alien students at the University. His office cooperates with other University agencies in handling admissions and financial aids for students from abroad. The office is primarily responsible for the reception and orientation of new foreign students and for all of the University's relations with the U. S. Immigration Service. The Adviser to Foreign Students cooperates with other officials and agencies of the University in providing necessary counseling for foreign students on personal, academic, financial, language or social problems. Assistance in an advisory capacity is provided for persons interested in study or travel abroad and for individuals and organizations concerned with international understanding and intercultural exchange.

STUDENT ORGANIZATIONS OFFICE

The student organizations office is interested in the activities of all organized student groups on the campus. It maintains complete records of these groups, including date of recognition, officers, constitution, etc. This office is also the authorization agency for social activities of all student organizations and provides information regarding regulations for such activities.

The Assistant Dean of Men is in charge of the student organizations office and should be contacted regarding the formation and recognition of new student organizations and regarding any problems which may arise concerning the operation of student organizations.

UNIVERSITY PLACEMENT SERVICE

University Placement Service is the core of the University placement system. It serves as the coordinating agency for all placement activity on campus by working in cooperation with the University departments, schools, and colleges. At the present stage of development, the U. P. S. supplements the placement activities which are carried on by various colleges, and offers direct assistance to graduating students of colleges who do not have their own placement activity.

The primary objective of the placement system is to assist students in the problem of finding suitable employment following graduation. This is done by supplying students with vocational information, information concerning job opportunities, and also assisting them in the preparation of credentials for presentation to prospective employers.

Representatives from business, industry, and government who visit the campus or write this office are given every opportunity to engage qualified University of Florida graduates.

FLORIDA CENTER OF CLINICAL SERVICES

The services of the five clinics which operate as a coordinated unit under the Division of Student Personnel are available to all University students without charge. Students are urged to seek assistance before their problems or difficulties become aggravated. The services of the clinics are available to the residents of the State of Florida for diagnostic purposes, therapy and counseling to the extent that off-campus subjects are needed in training programs and as personnel and facilities will permit.

PSYCHOLOGICAL CLINIC

One of the functions of this unit is to aid the student on an individual basis to plan a vocational objective consistent with his capacities, interests, and temperament. Approved test and counseling methods are used, and results are supplemented by detailed occupational information. Other services of this unit include help to students who find their work hampered by worries, adjustment difficulties, and other troublesome conditions. In addition to the above functions, the Psychological Clinic works closely with the Department of Psychology in its program for the training of clinical psychologists and counseling psychologists.

SPEECH AND HEARING CLINIC

This clinic conducts a speech and hearing examination during orientation week of all freshmen and transfer students. The personnel of this unit are available to all University students who have speech and hearing problems which are handicapping in nature. In addition to losses in hearing such impairments include: stuttering, cleft palate speech, articulatory problems, voice abnormalities and other deviations from acceptability. This clinic operates as a laboratory for those students in the Speech Department who are training for speech and hearing therapists, speech pathologists, and audiologists.

READING LABORATORY AND CLINIC

Through the use of interviews and diagnostic tests, this clinic plans a program of study and training in reading skills for each individual who demonstrates a need for assistance. The program is planned according to the needs of the student, the time available in the student's schedule, and the amount of training necessary for permanent improvement of reading skills. In addition to remedial functions, this unit trains teachers and graduate students in the techniques of diagnosis and remediation. The clinic also carries on a program of research in many aspects of the field of reading and aids students and faculty members engaged in allied research. This clinic is an integral part of the C3 program.

ADAPTED AND CORRECTIVE EXERCISES CLINIC

This program assists those students who have physical deviations which necessitate individual consideration in developing a sports program that is within the limits of their physical capacity. Due consideration is given to the individual's interests as well as the social and recreational needs for adult life. Programs of functional exercise are provided for those students having physical deviations that can be corrected or improved. The work is conducted under careful supervision and is based on adequate medical diagnosis and information.

MARRIAGE AND FAMILY CLINIC

The Marriage and Family Clinic deals with marital, premarital and family adjustment problems. Clients are assisted in gaining insight into problems and in weighing advantages and disadvantages of alternative adjustments. University students will find understanding and help in the solution of their marital and premarital problems.

OFFICE OF STUDENT PERSONNEL RECORDS

Using various sources, the Office of Student Personnel Records collects and integrates information concerning social and scholastic activities of each student. It makes this information available to qualified counselors who aid the student in making educational, social, psychological, and vocational adjustment. The keeping of personnel records is an effort in the understanding of, and service to, the individual student as he has contact not only with the classroom, but also with all phases of his university life.

STUDENT EMPLOYMENT

Every effort is made to aid qualified students in obtaining part-time employment. Opportunities are limited; consequently the number of part-time jobs available does not approach the number of applicants seeking these jobs. Every effort is made to place students in work that utilizes their training and experience.

Each student who is employed by the University must have an honor point average of C for the semester or term immediately preceding his employment. The average rate of pay per hour is between 60 cents and $1.00; the average earnings per month are about $50.

Student employment is directed by the Committee on Student Aid, Scholarships, and Awards, with the Assistant Dean of Men administering the program. All applications for work should be made prior to the opening of the semester in which employment is desired. Application for work, however, may be filed at any time.

Inquiries should be addressed to:

Assistant Dean of Men
University of Florida
Gainesville, Florida

SCHOLARSHIPS AND LOAN FUNDS

For information on scholarships and loans at the University of Florida students should refer to the Dean of Men, who is chairman of the Committee on Student Aid, Scholarships and Awards, and to the regular session catalog or the special bulletin on Scholarships, Loan Funds and Student Employment for details on the various types of aid.

HOUSING

GENERAL INFORMATION

Each student must make personal arrangement for his housing either by (1) applying to the Office of the Director of Housing for assignment to the University Housing Facilities or, (2) in the case of an upperclassman who wishes to do so, obtaining an accommodation in private housing or in his fraternity house.

All inquiries concerning housing applications, deposits, or rent payments in University Housing Facilities should be addressed to the Director of Housing, University of Florida, Gainesville. Checks or money orders for room deposits or rent payments should be made payable to the University of Florida and mailed to the Office of the Business Manager, Cashier, together with the application or rent invoice. Cash should NOT be sent through the mail.

An application for housing space may be filed at any time. Prospective freshmen are urged to apply for housing as early as possible.

A deposit payment of ten dollars must accompany the application for housing. Each applicant is given advance notice of exact assignment and deadline date for rent payment, if possible. Each applicant should read carefully the terms and conditions covering housing assignments as stated on the back of the application form and on the notification of assignment.

Roommate requests are honored wherever possible, provided the individuals wishing to room together submit their applications and pay room deposits at the same date, clearly indicate on their respective applications their desire to room together. A large number of selected foreign students are available for assignment as roommates with American students who are interested in foreign langauges, trade, and international relations; any student interested in the program should indicate this on his application.

RESIDENCE REGULATIONS

All freshman men and all single undergraduate women, with the exception of those whose residence is Gainesville or vicinity, are required to live in University Housing Facilities as long as space is available. With University approval under graduate women students, excepting freshmen, may live in their sorority houses.

HOUSING ADMINISTRATION AND SERVICES

Carefully selected and trained personnel are in charge of each area. Students with personal problems or questions concerning procedure or policy are aided by Head Residents, Resident Advisers, and Student Counselors.

The rates quoted are subject to change. All facilities are equipped with basic furnishings of beds, mattresses, dressers, desks, and chairs. Residents are encouraged to bring their own drapes, pictures, bedspreads, rugs, and lamps.

Linens may be rented on a weekly exchange basis; pillows, blankets, and some extra equipment may be rented on a term or semester basis. Linen rates

per week are: sheets, 15c each; towels, 7c each; pillow cases, 6c each. Blankets, pillows, and lamps are 60c per Summer Session.

Heavy luggage may be sent ahead, prepaid, addressed in the student's name and showing his assigned room number. Such shipments will be held until called for by the student. The University assumes no responsibility beyond the exercise of reasonable care for any shipment so received.

RESIDENCE HALLS FOR SINGLE STUDENTS

Mallory, Yulee, and Reid Halls

These three halls of modern design and of brick, concrete, and steel construction are normally reserved for women students. Features include: office-to-room intercommunication system; post-office boxes for each room in building lobbies; large lounge for each building; study lounge on each upper floor; large recreation rooms; laundry and other self-service facilities. Double and single rooms only, with the number of single rooms limited. Community bath facilities on each floor. Hot water system thermostatically controlled for each building. Fluorescent lighting. Rates per 8-weeks Summer Session (subject to change): Single room $46.75 per student; double room, $40. per student.

Buckman, Thomas, Sledd, and Fletcher Halls

These four halls of modern brick, concrete, and steel construction are normally reserved for men students. Each hall is divided into separate sections with accommodations for from 30 to 48 students per section. All but a few rooms have lavatories, and there is a community bath on each floor in each section. There are lounges, recreation rooms, and laundry facilities in the area. Room types: two-room suites for two, double rooms for two or three students, and single rooms. Summer Session rates range from $26.50 to $33. per student per 8-weeks Summer Session. (Murphree Hall will not be available for use by single students during the 1955 Summer Session.)

FACILITIES FOR MARRIED COUPLES AND FOR WOMEN WITH CHILDREN

Three Apartment Villages (Flavets), located on-campus, have been provided through the Public Housing Authority. Applications may be filed at any time and should be sent as soon as possible. Although applications are being accepted from non-veterans for assignment, no such assignment can be made until all veteran applicants have been placed. Applications from married veterans have exceeded the space available for the past two years and it is doubtful that any non-veteran can expect assignment for the 1955 Summer Session. Flavet I contains 26 buildings of one-story, temporary construction, divided into 100 apartment units of one, two, or three bedrooms. Flavet II, similar to Flavet I in construction, contains 20 buildings divided into 76 apartment units, of one, two, or three bedrooms. Flavet III contains 54 buildings, of two-story, temporary construction, divided into 448 apartment units of one or two bedrooms. All apartments are equipped with basic furniture requirements, but residents must furnish their own linens, rugs, kitchenware, etc. Cooking and heating are by gas, metered to the individual apartments. Electricity consumption in excess of the basic minimum is paid on a monthly basis on meter readings. Rent rates per month (including basic electricity) are one-bedroom apartment, $26.75; two-bedroom apartment, $29.50; three-bedroom apartment, $32.50.

Murphree Hall, Sections J and K will be available for assignment to couples and to women with children. The accommodations consist of two room suites (study room and bedroom). All suites have lavatories, and there is a community bath with shower and toilet facilities on each floor in each section. Cooking or preparation of food is not permitted. Summer Session rates are $59.50 per suite per eight weeks term.

OFF-CAMPUS HOUSING

Private homes and privately operated rooming houses and apartments provide many accommodations for students.

Off-campus listings are maintained in the Housing Office but are not compiled for mailing since availability changes constantly and a mutually satisfactory rental arrangement can normally be made by the student *only* after personal inspection of facilities and conference with the householder. Students seeking off-campus housing should come to Gainesville well before the school period to confer with the Housing Office about accommodations. Advance appointments for conferences may be made.

Arrangements for the September semester should be completed between the middle of June and the middle of August, for the February semester, during January, and for the Summer Session between the middle of April and the end of May.

COOPERATIVE LIVING ORGANIZATION

The Cooperative Living Organization, organized and operated by students to furnish economical living accommodations for its membership, is located at 117 NW 15th St. The qualifications for membership are financial need, scholastic ability, and references of good character. In order to secure membership in the CLO, students should apply to the CLO Vice-President at the above address.

SPRINGFIELD HALL

Springfield Hall, organized in September 1951, is the first women's living cooperative to be established on the campus. It is sponsored by the Wesley Foundation and is open to any student at the University who is interested in Christian cooperative living. It is organized on a non-profit basis, with each member being assessed her pro rata share of the actual operating cost.

Application for membership may be made at 1113 West University Avenue, or at the Wesley Foundation, 1320 West University Avenue.

FRATERNITIES AND SORORITIES

Most national fraternity and sorority chapters maintain their own houses adjacent to the University campus. Freshman women are not permitted to live in sorority houses. Special regulations apply to freshman men living in their fraternity houses. University student regulations are in effect for all sorority and fraternity houses.

GENERAL INFORMATION

LECTURES, PLAYS AND EXHIBITIONS

The University presents outstanding lectures as part of the general educational and cultural life of the campus. The speakers are selected with a view to offering to the University community stimulating presentations in the different areas of learning.

During the Summer Session, under the direction of the Department of Speech, full length plays, experimental one-act plays, and interpretative reading programs are presented. The University provides facilities for high grade performances under competent direction.

Exhibitions of contemporary work in the arts are brought to the campus under the sponsorship of the University Center of the Arts. Such exhibitions provide an opportunity to study examples of the best contemporary work in painting, industrial design, furniture, crafts, community planning, architecture, and the other arts.

RELIGIOUS AND SOCIAL LIFE

The leading religious denominations have attractive places of worship and students are welcome at every service. Students interested in the study of religion and in preparing themselves for religious leadership may take courses offered by the Department of Religion. Vesper services are conducted weekly on the campus lawn or in the Florida Union.

UNIVERSITY OF FLORIDA LIBRARIES SERVICES

The University Libraries, consisting of the General Library and 12 college, school and departmental libraries, contain more than 500,000 volumes and receive currently approximately 3500 serials.

The larger part of the library holdings are kept in the General Library building where four reading rooms offer seating space for 1200 readers. Located on the first floor is the University College Reading Room which has on open shelves some 8000 volumes useful to students in the first two years of college. The Humanities Reading Room and the Social Sciences Reading Room, on the second floor, are designed primarily as centers of library activity for the upperclassmen in the humanistic and the social studies. Around the walls on open shelves in each of these rooms are approximately 15,000 volumes and current issues of learned journals. On the third floor is the Science Reading Room with books and complete sets of journals in psychology, general science, mathematics, physics, geology and geography. Additional services in the General Library are the Browsing Room for recreational reading, the Map Alcove and Reading Room, music rooms, seminar rooms, and carrels and study cubicles for faculty members and graduate students.

The Library collection is particularly strong in Floridiana with research centered in the P. K. Yonge Library of Florida History, located on the first floor of the General Library building. Manuscripts and books by Florida authors are collected in the Florida Authors Room, which is the center for activity in creative writing.

Libraries for Agriculture, Architecture and Allied Arts, Biology, Chemistry-Pharmacy, Education, Engineering, Forestry, and Law are located in or near buildings housing the corresponding instructional units. The Library serving the extension activities of the University is located in the Seagle Building. The P. K. Yonge Laboratory School Library serves the Laboratory School.

STUDENT HEALTH SERVICE

Applicants for admission to the University are furnished a medical history and physical examination form by the Registrar's Office. The medical history is completed by the applicant before going to his physician for the physical examination. The physical examination must be performed and completed by a *licensed*

Doctor of Medicine and mailed by the doctor *directly* to Director, Student Health Department, University of Florida, Gainesville. The medical history and physical examination must be reviewed by a University Physician before the applicant is cleared for registration in the University. The type of physical education for which the applicant is qualified, and the physical eligibility of male students for R.O.T.C. training, is determined on the basis of this pre-entrance examination, after conferences and possible further examinations of those with reported physical defects.

The Student Health Department strives to prevent students with communicable diseases from entering the University. All students enrolled at the University are given annual chest x-rays by the State Health Department and every effort is made to detect evidence of tuberculosis of which the student may be entirely unaware. (Faculty members and employees of the University are also given annual chest x-rays). *Late registrants will be charged a special fee of* $2.00 *for their chest x-ray* if the x-ray units of the State Health Department are not available. Students should have been successfully vaccinated against smallpox within the past five years and the Health Department advises all students to be immunized to typhoid fever and tetanus before coming to the University.

The University maintains the Student Health Department in the Infirmary Building on the campus for the protection and medical care of the students in residence. The Outpatient Clinic is open during the day from 8:00 A.M. to 10:00 P.M. to provide all students in need of medical care with consultation and treatment. The hospital, of 65 beds, provides the student in need of hospitalization with twenty-four hour general nursing care and patients entering the hospital are under the constant observation of a University Physician. An emergency service is available to students who become acutely ill or are injured when the clinic is closed and such students may obtain treatment at any time by reporting to the Infirmary. University Physicians do not make calls outside the Infirmary or attempt to treat students in their rooms where the facilities for treatment are inadequate. Students should be instructed before leaving home to report immediately to the Infirmary should they become ill. Parents will be notified by a University Physician whenever a student is believed to be seriously ill.

The Student Health Department gives as complete a diagnostic, treatment and public health program as possible within the limitations of its personnel and equipment. It is staffed and organized for treating the acute illnesses which commonly occur while the student is in residence at the University. Facilities at the University Infirmary include the services of a competent medical staff, a psychiatrist, x-ray and clinical laboratories, and a physical therapy unit.

There are no facilities for dental work or eye refractions in the Student Health Department and therefore students are urged to have defects of vision and teeth corrected before coming to the University.

Major surgery is not performed at the Infirmary. Some minor surgery is performed in the Infirmary at University Physicians' discretion only. However, all surgical operations are the responsibility of the student and his parents and are performed with their consent, and if at another hospital at their expense. Whenever an emergency operation is imperative, the student shall be referred to a competent surgeon and transferred to the Alachua General Hospital in Gainesville, which is fully approved for surgery by the American College of Surgeons.

Students receiving severe, multiple or compound fractures will be handled in the same manner as students in need of emergency surgery.

Competent physicians and surgeons in Gainesville cooperate readily with the Student Health Department in consultations. Whenever a student is found to be in need of a consultant, the University Physician will arrange for such a consultation. Local physicians are also available for medical service to students at their places of residence at the student's expense.

Health service is available only to those students currently enrolled in the University who have paid the student health fee. In the case of married students, who are unacquainted with local physicians, the Student Health Department will be glad to recommend well qualified physicians to attend their families.

The Health Fee does not include surgery, consultation, or special duty nursing. These must be paid by the patient. Laboratory work done at the Infirmary is free of charge, but any work that has to be referred elsewhere is the responsibility of the patient. Diagnostic x-ray service is offered at a very nominal cost. All x-rays are interpreted by a qualified Radiologist. A charge of $2.20 per day is made for students admitted to the Infirmary as inpatients.

The University is not responsible for the medical care of students during vacation. The Infirmary will be closed during official University vacation periods, but in certain instances it may make special arrangements for the continued care of students who were hospitalized before the vacation period.

During epidemics, the facilities of the Student Health Department may be so overtaxed that the care of all ill students at the Infirmary will be impossible. In such an emergency every effort will be made to provide for the care of students outside of the Infirmary, but the Student Health Department will not assume payment for services rendered by outside physicians or other hospitals.

ANNOUNCEMENTS

The *Orange and Blue Bulletin* is the official bulletin of the Summer Session. This mimeographed sheet, published every other day during the Summer Session and posted on all bulletin boards, carries notices of changes in schedule, meetings, and other pertinent information. Announcements made in the General Assembly; notices on the bulletin boards in Florida Union, Peabody Hall, and Anderson Hall; and news items in the *Summer Gator* serve to keep the Summer Session students informed concerning student activities.

ORGANIZATIONS

PHI KAPPA PHI

A chapter of the Honor Society of Phi Kappa Phi was established at the University in 1912. To be eligible for consideration for membership, a student must previously have earned at the University at least thirty semester hours of credit, must have been guilty of no serious breach of discipline, and must stand among the upper tenth of all candidates for degrees in his college. Eligibility for consideration for membership is assured every student within an honor point average of 3.30 or higher, but a student who comes within the quota of his college may be considered if his honor point average is not below 3.00. Graduate students meeting certain prescribed requirements are also considered for membership.

KAPPA DELTA PI

The Upsilon Chapter of Kappa Delta Pi was established at the University of Florida in 1923. The purpose of the society is to recognize and promote merit in educational study and service. Both men and women are admitted to membership. Members are chosen from juniors, seniors, graduate students, faculty, and alumni. Requirements for membership are, in general, as follows: a scholastic average of at least B; evidence of abiding interest in educational service; a good professional attitude; and good personal-social characteristics. During the Summer Sessions the chapter holds a meeting each week.

PHI BETA KAPPA

Phi Beta Kappa was established on the campus of the University of Florida in 1938. It is the oldest national fraternity, being founded in 1776. In conformity with the national objectives of the society, the University of Florida chapter restricts election to the College of Arts and Sciences. Not more than 15 per cent of the senior class graduating in each semester, including the graduating class of the Summer Session is eligible for election.

In addition to conferring membership upon qualified seniors in the College of Arts and Sciences, the society seeks, by means of an Award in Recognition of Creative Achievement, to honor each year not more than one graduating senior from all the colleges on the campus who, irrespective of his honor point average, has distinguished himself throughout his undergraduate career in such fields of activity as creative writing, dramatics, and forensics, the fine arts, or any other liberal discipline, and has revealed a decided talent, a persistent interest, and a prospect of mature achievement in later life.

PHI DELTA KAPPA

Beta Xi chapter of Phi Delta Kappa, national professional education fraternity for men, was installed at the University of Florida early in 1949. Dedicated to ideals of research, service and leadership, this organization is one of the oldest and largest professional fraternities. Men are chosen for Phi Delta Kappa on the basis of scholarship, leadership, potentiality, and qualities of personality considered as promising for the development of public education in the state and in the nation.

RECREATION

THE FLORIDA UNION

The Florida Union, the official center of student activities, is financed primarily by student activities fees. Some of the facilities and services offered by the Union include music listening rooms, a craft and hobby shop, photographic darkrooms, browsing library, game room, and lounges where students may spend leisure hours. Fifteen guest rooms are available for guests of students and University personnel. The Union also provides an embosograf poster service, information desk, a Western Union substation, auditorium, and meeting rooms for student activity groups. Offices for the President of the Student Body, the Executive Council, Honor Court, and all student publications are located in the Florida Union.

The Florida Union Social Board, composed of students interested in planning student activities, sponsors a variety of social programs for the student body. Some of the regular activities sponsored by the Social Board are bridge tournaments, dancing classes, coffee hours, movies, outings, dances, and Club Nautilus (the campus night club). Other special activities are sponsored by the Social Board during the year. The committees of this board are open to all interested students.

The University's Camp Wauburg operated by the Florida Union is a recreational area for the exclusive use of University personnel. This area is located nine miles south of the campus. Facilities include a large picnic area, a recreational building, a bath house, and a play ground area for volley ball, horseshoes, badminton, softball. Camp Wauburg has swimming, boating, and fishing facilities.

INTRAMURAL AND RECREATIONAL ATHLETICS

A broad recreational program of athletics will be conducted for the students and faculty by the College of Physical Education and Health during the Summer Session.

A Summer Session all-campus league will be organized with competition in softball, tennis (singles and mixed doubles), shuffleboard (singles and mixed doubles), swimming, volleyball, table tennis, and handball tournaments, Appropriate awards will be made to winning teams and individuals in all sports.

A sports' clinic will be conducted prior to the tennis, volleyball, and handball tournaments. Students have the opportunity to learn skills in recreational sports through the Department of Required Physical Education. Further information may be obtained at Room 134, Florida Gymnasium.

The athletic and physical educational facilities, including the use of the swimming pool and equipment room service, will be available to all *bona fide* University students. Use of these services and facilities will also be extended to students' families, faculty, employees, and their immediate families, upon payment of a fee of $1.00 per individual. The *Summer Gator*, the *Orange and Blue Bulletin*, and the *Florida Intramural Bulletin* will carry current notices and announcements about various phases of the program.

SWIMMING POOL

The swimming pool will be open daily during the Summer Session. Dressing facilities for women are located in the Women's Gymnasium. The facilities for men are located in Florida Gymnasium.

THE DIVISION OF MUSIC

The Division of Music offers during the Summer Session opportunities for those students interested to participate in bands, orchestras and choral groups.

RELIGIOUS AND SOCIAL LIFE

The leading religious denominations have attractive places of worship and students are welcome at every service. Students interested in the study of religion and in preparing themselves for religious leadership may take courses offered by the Department of Religion.

ACADEMIC REGULATIONS

STUDENT RESPONSIBILITY

Each student must assume full responsibility for registering for the proper courses and for fulfilling all requirements for his degree. Several days before registration students should confer with the deans of their respective colleges regarding choice of courses. Juniors and seniors should confer with the heads of the departments in which they expect to earn majors. Candidates for graduation must file, in the office of the Registrar, formal application for a degree and must pay the diploma fee very early in the term in which they expect to receive the degree. The official calendar shows the latest day on which this can be done.

Courses can be dropped or changed only with the approval of the dean of the college in which the student is registered and by presentation of the cards authorizing the change at the office of the Registrar. Unclassified students must secure the approval of the Dean of the University for this purpose.

CREDITS

The term credit as used in this bulletin in reference to courses is equal to one semester hour.

RESIDENCE REQUIREMENTS

1. The minimum residence requirement for the baccalaureate degree is two semesters, or one semester and three six-week summer terms, or one semester and two eight-week summer terms, or five six-week summer terms or four nine-week summer terms. New students offering advanced standing must meet this requirement after entrance to the University. Students who break their residence at the University by attending another institution for credit toward the degree must meet this requirement after re-entering the University.

2. Students are required to complete the last thirty credit hours (except in the College of Law) applied toward the baccalaureate degree during regular residence in the respective colleges from which they expect to be graduated. Exception to this regulation may be made only upon written petition approved by the faculty of the college concerned, but in no case may the amount of extension work permitted exceed more than twelve of the last thirty-six hours required for a baccalaureate degree.

3. For the degree of Bachelor of Laws, a student must complete at least 96 weeks of study in residence in an accredited law school of which at least 62 must have been in residence in the College of Law, University of Florida. The last 28 credits and the last 30 weeks of study must be in residence in this College unless other arrangements are made in advance by written petition approved by the faculty of the College of Law. (In the case of a student admitted prior to September, 1953, completion of at least 90 weeks of study in residence at an accredited law school is required of which at least 56 weeks must have been in residence at this College.)

4. For residence requirements for the various graduate degrees see the Graduate School section of this bulletin.

AMOUNT OF EXTENSION WORK PERMITTED

No student will be allowed to take more than one-fourth of the credits toward a degree by correspondence study and extension class work. Extension work to apply on the last thirty hours is authorized only by special action of the faculty

of the college in which a student is registered. Such authorization must be obtained prior to enrollment in extension work. If authorization is given, no student is permitted to earn more than twelve of the last thirty-six hours in this manner. Under no circumstances will a student in residence be permitted to register for a correspondence course if that course is being offered in the Summer Session.

MAXIMUM AND MINIMUM LOAD

The maximum load for which an undergraduate may register in an eight-week term is 9 semester hours. The maximum load in a six-week term is 6 semester hours.

The minimum load for any student is three semester hours. Original registration for less than three hours must be approved by the Dean of the college in which the student is enrolled. After registration, the student may reduce his load to less than three hours only with the approval of the Senate Committee on Student Petitions.

UNCLASSIFIED STUDENTS

1. This group will include (a) students from other colleges and universities who wish to earn credits in the Summer Session to be transferred eventually to their respective institutions, and (b) other students not candidates for degrees.

2. In the event any student who has attended a Summer Session as an unclassified student later wishes to become a candidate for a degree in one of the colleges or schools of the University, he may do so (1) by regularizing his admission to the University (present all the credentials required) and (2) by meeting the requirements (in effect at the time of his application for candidacy) for admission to the school or college he desires to enter.

3. If such a student is admitted to candidacy for a degree, credits earned while an unclassified student will be accepted insofar as they apply toward the degree requirements (in effect at the time he is admitted to candidacy) of the college or school chosen by the student. A student must have been registered as a regular student in the college or school from which he expects to receive the Bachelor's Degree for at least three six-week summer terms or two eight-week summer terms, and in the Graduate School for at least five summer terms for the Master's Degree. The residence requirement (see above) in the University will not be waived in any case.

4. Students regularly enrolled during the academic year cannot become unclassified students during the Summer Session.

5. Each student registered as an unclassified student will be given a definite statement of the policies governing the application for admission to candidacy, in the various colleges and schools. This statement will make clear that credits earned while a student is registered as an unclassified student can be applied toward a degree in the college of his choice only if under regular procedure this credit will apply toward that degree.

6. The registration blanks for unclassified students will be approved by the Dean of the University and assistants chosen by him from the faculty.

ABSENCES OR UNSATISFACTORY WORK

Absences count from the first meeting of the class rather than from the date a student registers for a class.

A. If any student accumulates absences or fails to do class work to the extent that further enrollment in the class appears to be of little value to him or detrimental to the best interest of the class, it shall be the duty of the instructor to warn such student in writing that further absences or failure to do class work will cause him to be suspended from the course with a failing grade. Where possible this warning will be delivered personally; otherwise, it will be mailed to the student's last University address by the Registrar. Instructors shall immediately report all such warnings to the department head or course chairman. Should any absences or failure to do class work be incurred after this warning, the student will be suspended from the class and be given a failing grade by the Registrar upon receipt of notice from the instructor showing the date of warning.

   Should this reduce the load of the student below the minimum required, he will be suspended from the University.

B. When a student is suspended from a course under the provisions of A above, his parents shall be notified in writing by the Registrar.

C. A student who has been warned for absences or unsatisfactory work in any class should not incur additional absences in that course even though he has not been absent from the class for nine scholastic days. It is the responsibility of the student to see that his class work and attendance is satisfactory.

PROBATION, SUSPENSION, AND EXCLUSION FOR ACADEMIC REASONS

The University of Florida accepts the responsibility of providing sound higher education. This includes the obligation to both the public and to the student of providing good higher education in an economical and efficient manner. In order to discharge this responsibility, the University must require reasonable academic progress from its students in return for the opportunity afforded them by a tax supported state university. To continue the registration of students who have demonstrated that they do not possess the necessary ability, or preparation, or industry, or maturity to obtain a reasonable benefit from a program of University study is inconsistent with this responsibility.

Consequently, the University of Florida Senate has enacted the following University regulations covering probation, suspension, and exclusion for academic reasons. Any college of the University may enforce additional academic standards and each student is responsible for observing the regulations of his college relating to such additional standards.

It is important to note that a student may be placed on various kinds of probation for reasons other than those listed below. For example, he may be admitted to the University on a probationary basis or he may be placed on disciplinary probation by reason of conduct or, in some cases, he may be placed on probation by the Committee on Student Petitions. In cases such as the foregoing the individual student will receive in writing a specific set of conditions which he must meet in order to remove the probation. In most cases these conditions will require loads, grades, etc., that are above the minimums set forth below. Inasmuch as such a student will have been placed on one of these specific probations only because of some previous academic difficulty or misconduct, in his particular case the specific terms of probation which are set forth for him become the necessary minimum achievement rather than the conditions set forth below.

ACADEMIC PROBATION

Lower Division Students:

1. A Lower Division student who fails to maintain a 1.0 honor point average for all work attempted in his first or second semester at the University of Florida will be placed on academic probation for his next semester.

2. A Lower Division student on academic probation (Under Article IV or XV) during his second semester will be ineligible for further registration in the University unless he maintains a 1.0 honor point average in all work attempted in that semester.

3. A Lower Division student who has attempted more than two semesters and who fails to maintain a 1.5 honor point average on all work attempted each semester thereafter will be placed on academic probation for his next semester.

4. A Lower Division student who has attempted more than two semesters and who is on academic probation (Under Article IV or XV) shall be ineligible for further registration in the University unless he maintains a 1.5 honor point average in all work attempted in that semester, or has a 1.5 cumulative honor point average in the total of all work attempted to date.

5. A Lower Division student who has attempted six semesters of work in the Lower Division shall be ineligible for further registration in the University unless he has been admitted to an Upper Division college.

A semester during which a student withdraws after the last date for dropping courses without a failing grade and any semester in which a student is suspended for non-attendance or unsatisfactory work shall be considered as a semester attempted in administering these regulations (Sections 1 through 5 above).

Upper Division Students:

6. Any Upper Division student who fails to maintain a 1.8 honor point average for all work attempted in any semester shall be placed on academic probation for his next semester.

7. An Upper Division student on academic probation (under Article IV or XV) will be ineligible for further registration in the University unless he maintains a 2.0 honor point average in all work attempted that semester or has 2.0 cumulative honor point average in the total of all work attempted while registered in his present Upper Division college.

SUSPENSION

All Undergraduate Students:

8. All Undergraduate students, (all those classified other than 6) who do not receive passing grades (A, B, C, or D) in more than one-half of the hours attempted in any term or semester shall be suspended immediately from the University for one full semester; however, failure in only one course carrying five semester hours credit or less shall not cause the student to be suspended under this provision. All Undergraduate students who are dropped from a course for excessive absences or unsatisfactory work and as a result of such drop are left with a load of less than 12 semester hours will be suspended for one full semester. A student eligible to return to the University after such a suspension shall be placed on academic probation for his next semester. The terms for satisfying his probation shall be those provided above appropriate to the number of semesters attempted. A second suspension for academic reasons shall be final and the student will not be eligible for further attendance at the University.

Graduate Students:

9. Any graduate student may be denied further registration in the University or in his graduate major when his progress toward completion of his planned graduate program becomes unsatisfactory.

ADMINISTRATIVE PROVISIONS:

10. All actions taken under these regulations shall be reflected by appropriate notations on the student's record.

11. A student attending a summer session prior to his probational semester may satisfy the terms of his probation if he obtains the necessary probation honor point average as indicated above, computed by taking the grades of his last semester and summer session together.

COMPREHENSIVE EXAMINATIONS

The comprehensive course examinations (of which the student must successfully pass six or more to complete the program of the University College) are administered by the Board of University Examiners and are given in January, May, and August of each year. A student must be familiar with the work of the various courses and be able to think in the several fields in a comprehensive way in order to pass these examinations. Standings on the comprehensive examinations are issued by the Board of Examiners and are not subject to change by any other agency.

APPLICATIONS FOR COMPREHENSIVE EXAMINATIONS

University College students who are enrolled in a course at the time the examination is given need not make application for it. University College students who are not enrolled in a course at the time an examination is given and who wish to take the comprehensive examination must apply in writing to the Board of Examiners for permission prior to the last date set for filing such applications. *Applications will not be accepted from students registered in the colleges of the Upper Division.* Before the application is accepted the applicant will be required to furnish the Board of Examiners with proof that this privilege has not been used to avoid the payment of usual University fees. Applications will be accepted only for those examinations which are administered by the Board of Examiners. The Board of Examiners is the only agency authorized to give University College students examinations by application.

THE UNIVERSITY COLLEGE

INTRODUCTORY STATEMENT

In a reorganization at the University of Florida in 1935, all freshmen and sophomores were placed in one college. The University College administers all the work of the Lower Division, which includes the pre-professional work for the Upper Division schools and colleges and a core program of basic education for all students. In 1944 the American Council on Education defined this program: "General education refers to those phases of nonspecialized and non-vocational education that should be the common denominator, so to speak, of educated persons . . . the type of education which the majority of our people must have if they are to be good citizens, parents, and workers." During his freshman and sophomore years at the University, a student's time is about evenly divided between these objectives of general education and those of pre-professional or professional preparation.

While fully accepting its responsibility toward the professional training of men who remain four years or longer and earn degrees, the University of Florida as a state institution also accepts its civic responsibility to help those who spend only one or two years at the University. These students—more than two-thirds of all enrolled—are not "failures" because they do not continue and earn degrees, and they probably deserve more from the state university than an odd assortment of only "introductory courses." Consequently at the University of Florida a group of comprehensive courses have been worked out to give some unity and meaning to a beginner's program. These comprehensive courses that make up the core program are:

1. *American Institutions* (known hereafter as C-1)
2. *The Physical Sciences* (C-2)
3. *Reading, Speaking and Writing:* Freshman English (C-3)
4. *Practiced Logic:* Straight Thinking (C-41)
   Fundamental Mathematics (C-42)
5. *The Humanities* (C-5)
6. *Biological Science* (C-6)

GUIDANCE

If a freshman is still undecided about his life's work, he is not urged to guess on registration day. His program may be made up largely from the comprehensives which help him direct his thinking toward a desirable objective, together with approved electives that may further enable him to explore interests and needs. But whether the student is decided or undecided about his life's work, these comprehensive courses provide basic preparation that every educated person should have.

Thus since the purpose of general education is to replace fragmentation, the program absorbs much of the responsibility for guidance. Every subject or course of the University College program is designed to *guide* the student. During the time that he is making tentative steps toward a profession by taking special subjects to test aptitudes, interests, and ability, he is also studying the several great areas of human understanding and achievement. The work in the University College presents materials which are directly related to life experiences and which will immediately become a part of the student's thinking to guide him to making correct *next steps*. Thus the whole program—placement tests, progress reports, vocational aptitude tests, basic vocational materials, selected material in the comprehensive courses, student conferences, adjustments for individual differences, election privileges, and comprehensive examinations—all are parts of a plan designed to *guide* students.

UPPER DIVISION COOPERATION

While the necessary correlation and unification is attempted at the University College Office, throughout the University College period students consult Upper Division deans and department heads to discuss future work. During the last month of each school semester these informal conferences are supplemented by a scheduled formal conference at which each student fills out a pre-registration card for his prospective Upper Division work.

UNIVERSITY COLLEGE COUNSELLORS

The University College Counsellors do not assume the responsibility that every

student himself must take, but they help in every way possible as he assumes a greater and greater share of responsibility in his University education. The counsellors are located in the University College Office.

Every spring the University is privileged to give placement tests to all seniors in every high school of the state. Since many high schools are also trying to acquaint the student with the common body of knowledge so needed by all, their records along with the placement test results indicate the variation that may be made in the general program.

A student who has had three or four years of preparatory school study in any one of the subject areas of the comprehensive courses, and his placement tests or progress tests indicate superior knowledge and understanding at this level may consult one of the counsellors for subsequent needed program adjustment.

THE ASSOCIATE OF ARTS CERTIFICATE

The Associate of Arts Certificate is awarded in recognition of the successful completion of two years of planned work at the University of Florida. In specific detail, one must pass at least sixty-four semester hours including pre-professional work and the comprehensive courses that make up the core program.

PROGRAMS OF STUDY

NORMAL PROGRAM

Freshman Year	Hours
1.—American Institutions	8
2.—The Physical Sciences	6
3.—Reading, Speaking and Writing—Freshman English	8
4.—Logic and Mathematics	6
5.—Departmental Electives	2-6
Military Science; Physical Fitness	
	30-34

Sophomore Year	Hours
1.—The Humanities	8
2.—Biological Science	6
3.—Departmental Electives	16-20
Military Science; Physical Fitness	
	30-34

At least sixty-four semester hours, which may include four hours of Military Science, are required to complete the Lower Division.

Basic Program for Pre-Medical or Pre-Dental Students.—The program listed below covers the minimum pre-medical or pre-dental work prescribed by the American Medical Association or by the American Dental Association for its member schools. Since some schools require more, the student should write directly to the medical or dental school he is considering for a catalog and specific information concerning its requirements.

BASIC TWO-YEAR PROGRAM FOR PRE-MEDICAL OR PRE-DENTAL STUDENTS

Freshman Year	Sophomore Year
1.—American Institutions	1.—The Humanities
2.—General Chemistry	2.—Organic Chemistry
3.—Reading, Speaking and Writing—Freshman English	3.—General Physics
4.—Biological Science	4.—French or German
5.—General Animal Biology (Laboratory)	Military Science; Physical Fitness
Military Science; Physical Fitness	

AGRICULTURE

The program for freshmen and sophomores expecting to earn a degree in the College of Agriculture should be:

a) For students intending to major in Agricultural Economics—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—Cy. 109-110, Elements of Chemistry	6
2.—C-6, Biological Science, or BTY. 101-102	6	2.—ATG. 211-212, Elementary Accounting	6
3.—C-3, Reading, Speaking and Writing: Freshman English	8	3.—C-5, The Humanities	8
4.—C-4 or MS. 105-106, Basic Mathematics	8	4.—AS. 201, Principles of Agricultural Economics	3
5.—Military Science; Physical Fitness	2	5.—ES. 206, Basic Economics	3
	32	6.—Electives in Agriculture or Basic Sciences	2-8
		7.—Military Science; Physical Fitness	2
			30-36

b) For students intending to major in Horticulture (Floriculture and Ornamental Programs)—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—CY. 109-110, Elements of Chemistry	6
2.—BTY. 101-102, General Botany	6	2.—C-4, Logic and Mathematics	6
3.—C-3, Reading, Speaking and Writing: Freshman English	8	3.—C-5, The Humanities	8
4.—Electives in Agriculture or Basic Sciences	9	4.—HE. 201, Principles of Horticulture	3
5.—Military Science; Physical Fitness	2	5.—Electives in Agriculture or Basic Sciences	9
	33	6.—Military Science; Physical Fitness	2
			34

c) For students intending to major in Horticulture (Landscape Nursery Program)—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—C-41, Logic	3
2.—BTY. 101-102, General Botany	6	2.—C-5, The Humanities	8
3.—C-3, Reading, Speaking and Writing: Freshman English	8	3.—CY. 109-110, Elements of Chemistry	6
4.—*MS. 105, Basic Mathematics	4	4.—HE. 201, Principles of Horticulture	3
5.—AE. 102, Vision and Graphics	3	5.—AE. 203, Basic Design	3
6.—Electives in Agriculture or Basic Sciences	3	6.—AE. 204, Organic Planning	3
7.—Military Science; Physical Fitness	2	7.—CE. 223, Surveying	3
	84	8.—CE. 301, Forest Surveying	3
		9.—Military Science; Physical Fitness	2
			34

*Students not qualified for MS. 105 will take C-42 during the freshman year.

d) For students intending to major in Agricultural Engineering, Agronomy, Animal Husbandry and Nutrition, Botany, Dairy Husbandry, Dairy Manufactures, Entomology, General Agriculture, Horticulture (Fruit, Vegetable and Food Technology programs), Plant Pathology, Poultry Husbandry, and Soils—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-6, Biological Science, and/or BTY. 101-102	6-12	1.—C-1, American Institutions	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-4, Logic and Mathematics	6
3.—CY. 121-122, General Chemistry	8	3.—C-5, The Humanities	8
4.—Electives in Agriculture or Basic Sciences	0-6	4.—Electives in Agriculture or Basic Sciences	6-12
5.—Military Science; Physical Fitness	2	5.—Military Science; Physical Fitness	2
	30-36		30-36

e) For students intending to major in Agricultural Chemistry—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—C-5, The Humanities	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-6, Biological Science	6
3.—*MS. 105-106, Basic Mathematics	8	3.—C-41, Practical Logic	3
4.—**CY. 217-218, General Chemistry and Qualitative Analysis	8	4.—EH. 133, Effective Writing	3
5.—Military Science; Physical Fitness	2	5.—CY. 331, Introductory Quantitative Analysis	4
	34	6.—Approved Electives	6
		7.—Military Science; Physical Fitness	2
			32

*Students not qualified for M.S. 105-106 will take C-42 and C-41 during the freshman year and M.S. 105-106 in the sophomore year. These students will take CY. 331 in the Upper Division.

**Students not qualified for CY. 217-218 will take C-21 and C-22.

f) For students intending to major in Agricultural Education—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—C-41, Practical Logic	3
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—C-42, Fundamental Mathematics	3
3.—C-6, Biological Science	6	3.—C-5, The Humanities	8
4.—AY. 221, General Field Crops	3	4.—BTY. 101-102, General Botany	6
5.—PY. 201, Fundamentals in Poultry Production	3	5.—CY. 109-110, Elements of Chemistry	6
6.—Military Science; Physical Fitness	2	6.—DY. 211, Principles of Dairying	3
		7.—HE. 212, Vegetable Gardening	3
		8.—Military Science; Physical Fitness	2
	30		34

g) For students intending to major in Bacteriology (Microbiology)—

Freshman Year	Hours	Sophomore Year	Hours
1.—C-1, American Institutions	8	1.—C-5, The Humanities	8
2.—C-3, Reading, Speaking and Writing: Freshman English	8	2.—FH. or GN. 133-134, Language	6
3.—C-6, Biological Science and BLY. 161-162, Biology Laboratory or BTY. 101-102, General Botany	6-10	3.—PS. 201-202, General Physics	8
4.—*MS. 105-106, Basic Mathematics	8	4.—CY. 121-122, General Chemistry or CY. 217-218, General Chemistry and Qualitative Analysis	8
5.—Military Science; Physical Fitness	2	5.—Electives	0-4
		6.—Military Science; Physical Fitness	2
	32-36		32-36

*Students not qualified for MS. 105-106 will take C-4 first.

Some variations from these programs are desirable in the different curricula of the College. The curriculum of the department in which the student intends to major should be consulted for these details. Students planning to major in Animal Husbandry, Dairy Husbandry, or Poultry Husbandry are required to take BLY. 161-162 as corequisites with C-6 and ACY. 208. At least 64 academic hours which may include 4 hours of Military Science are required to complete the Lower Division; additional approved electives taken during the first two years may reduce the number of hours required for an Upper Division degree.

For desirable electives in Agriculture, students should consult the head of the department in which they intend to major. These electives during the first two years should be distributed so as to give some acquaintance with the different phases of Agriculture, and are limited to a single course in any one department. It is required that all students graduating in Agriculture take at least one course in each of the following departments: Agricultural Economics, Soils, either Agronomy or Horticulture, and either Animal Husbandry and Nutrition, Dairy Science or Poultry Husbandry. All such students, except those majoring in Agricultural Chemistry and Bacteriology, shall also take at least one course in Agricultural Engineering and in Entomology. Courses suitable for election in the freshman year are AG. 306, AL. 309, AY. 221, DY. 211, EY. 203, FY. 313, and PY. 201. In the sophomore year these courses may also be elected, and in addition the following: AG. 301, AS. 201, AS. 306, AY. 324, CL. 223, HE. 201, PT. 321, SLS. 301, and SLS. 302.

FORESTRY

Students planning to enter the School of Forestry should complete the respective outline of courses listed in the regular University Catalog as required for the freshman and sophomore years for the Forestry curriculum of their choice.

Those students falling below a 2.0 grade average will be considered for admittance to the School of Forestry only after they have demonstrated the ability to satisfactorily carry on the professional courses in Forestry.

ARCHITECTURE AND ALLIED ARTS

The University College student who plans to earn a degree in the College of Architecture and Allied Arts has one of the following basic programs:

A.—For the degree in Architecture or in Building Construction—

Freshman Year	Hours	Sophomore Year	Hours
1.—American Institutions	8	1.—The Humanities	8
2.—Reading, Speaking and Writing: Freshman English	8	2.—Biological Science	6
*3.—Ms. 105-6	8	**3.—PS. 201-2	6
4.—AE. 101-2	6	4.—AE. 203-4	6
5.—Military Science or Elective	2	5.—AE. 205-6	6
6.—Physical Fitness	0	6.—Military Science or Elective	2
	32	7.—Physical Fitness	0
			34

B.—For the degree in Landscape Architecture—

Freshman Year	Hours	Sophomore Year	Hours
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—CL. 223	3
*4.—MS. 105	4	4.—CY. 109	3
5.—AE. 101-2	6	5.—AE. 203-4	6
6.—Military Science or Elective	2	6.—AE. 205	3
7.—Physical Fitness	0	7.—Military Science or Elective	2
	34	8.—Physical Fitness	0
			31

C.—For the degree in Interior Design—

Freshman Year	Hours	Sophomore Year	Hours
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—AE. 203-4	6
4.—Logic and Mathematics	6	4.—AE. 205	3
5.—AE. 101-2	6	5.—Approved Elective	3
6.—Military Science or Elective	2	6.—Military Science or Elective	2
7.—Physical Fitness	0	7.—Physical Fitness	0
	36		28

D.—For the degree in Painting and Drawing, Commercial Art, Crafts, Costume Design, or History of Art.—

Freshman Year	Hours	Sophomore Year	Hours
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing: Freshman English	8	3.—ART 124	3
4.—Logic and Mathematics	6	4.—ART 222	3
5.—ART 121	3	5.—ART 225-6	6
6.—ART 123	3	6.—Military Science or Elective	2
7.—Military Science or Elective	2	7.—Physical Fitness	0
8.—Physical Fitness	0		28
	36		

ARTS AND SCIENCES

A student who plans to earn a 4-year degree in the College of Arts and Sciences should secure credit in all of the comprehensive areas as indicated by the University College. Electives in the first two years should be taken in introductory courses in possible major fields and in foreign languages. Students who have selected a major should limit their University College electives in the major to permit taking introductory and intermediate courses in other liberal arts areas.

For information concerning special programs of instruction and the details of degree requirements the student is referred to the regular University Catalog.

*Students not qualified for MS. 105-6 will take C-42 first.
**Students not qualified for PS. 201-2 will take C-22 first.

BUSINESS ADMINISTRATION

To enter the College of Business Administration and to register for the Curriculum in Business Administration or for the Curriculum in Public Administration, students are required to complete the curriculum below or the equivalent thereof in each of the courses or areas of knowledge listed including the following:

ES. 205-206.—Basic Economics
ATG. 211-212.—Elementary Accounting
ES. 203.—Elementary Statistics
MS. 208.—Business Mathematics

Freshman Year

First Semester	Hours	Second Semester	Hours
1.—American Institutions	4	1.—American Institutions	4
*2.—The Physical Sciences	3	*2.—The Physical Sciences	3
*3.—Logic or Mathematics	3	*3.—Mathematics or Logic	3
4.—Reading, Speaking and Writing: Freshman English	4	4.—Reading, Speaking and Writing: Freshman English	4
5.—Approved Electives	3	5.—Approved Electives	3
Military Science; Physical Fitness	1	Military Science; Physical Fitness	1
	15-18		15-18

Sophomore Year

1.—Accounting	3	1.—Accounting	3
2.—Economics	3	2.—Economics	3
3.—The Humanities	4	3.—The Humanities	4
4.—Biological Science	3	4.—Biological Science	3
5.—Statistics or MS. 208	3-4	5.—Statistics or MS. 208	3-4
Military Science; Physical Fitness	1	Military Science; Physical Fitness	1
	17-18		17-18

At least sixty-four semester hours, which may include four hours of Military Science are required to complete the Lower Division.

COURSES OFFERED BY THE COLLEGE OF BUSINESS ADMINISTRATION AVAILABLE TO STUDENTS IN THE UNIVERSITY COLLEGE

The following courses offered by the College of Business Administration may be taken by students in the University College: ATG. 211-212, Elementary Accounting; BS. 231, Principles of Marketing; BS. 260, Fundamentals of Insurance; BS. 271, Principles of Management; ES. 203, Elementary Statistics; ES. 205-206, Basic Economics; ES. 208, Consumer Economics; RE. 291, Real Estate Fundamentals; and RE. 295, Housing and Home Ownership.

EDUCATION

University College students working toward a degree in the College of Education should pursue one of the following programs:

Basic Program

(Except Agricultural Education and Education for the Exceptional Child)

Freshman Year	Credits	Sophomore Year	Credits
1.—American Institutions	8	1.—The Humanities	8
2.—The Physical Sciences	6	2.—Biological Science	6
3.—Reading, Speaking and Writing—Freshman English	8	3.—Logic or Mathematics	3
4.—Logic or Mathematics	3	4.—Military Science or Electives	2
5.—Military Science or Electives	2	5.—Electives (from list below)	12
6.—Electives (from list below)	6-8	6.—Physical Fitness	0
7.—Physical Fitness	0		31
	33-35		

Electives:
Elementary Education: EDF. 140-141, 220-221; English, Speech 6 hrs.; MSC. 161.*
**Secondary Education: EDF. 140-141, 220-221.
**Business Education; BEN. 81, 91, 181; EDF. 140-141, 220; ES. 205-6.
**Industrial Arts Education: EDF. 140-141; IN. 100, 102, 103, 211.

*Students must complete MSC. 160 or pass a music skills test as prerequisite to MSC. 161.
**Three hours in the Human Adjustment area, other than C-41, are required. These electives may be taken either in the University College or in the College of Education.

For the basic programs in Agricultural Education and Education for the Exceptional Child, consult the *Catalog*.

ENGINEERING

The program for first and second year students expecting to earn a degree in the College of Engineering is as follows:

First Semester	Credits
1.—C-11, American Institutions	4
*2.—C-21, The Physical Sciences	3
3.—C-31, Reading, Speaking, and Writing: Freshman English	4
*4.—C-42, Fundamental Mathematics	3
5.—MY. 101, Military Science	1
6.—PL. 101, Physical Fitness	0
	15

Second Semester	Credits
1.—C-12, American Institutions	4
*2.—C-22, The Physical Sciences	3
3.—C-32, Reading, Speaking, and Writing: Freshman English	4
*4.—C-41, Practical Logic	3
5.—MS. 105, Basic Mathematics	4
6.—MY. 102, Military Science	1
7.—PL. 102, Physical Fitness	0
	19

Third Semester	Credits
1.—MS. 106, Basic Mathematics	4
2.—CY. 217, General Chemistry and Qualitative Analysis	4
3.—C-51, The Humanities	4
**4.—ML. 181, Engineering Drawing	3
5.—MY. 201, Military Science	1
6.—PL. 103, Physical Fitness	0
	16

Fourth Semester	Credits
1.—MS. 353, Differential Calculus	4
2.—CY. 218, General Chemistry and Qualitative Analysis	4
3.—C-52, The Humanities	4
**4.—ML. 182, Descriptive Geometry	3
5.—MY. 202, Military Science	1
6.—PL. 104, Physical Fitness	0
	16

Students whose records in the University College do not indicate that they are qualified to take the professional courses in Engineering will not be admitted to the College of Engineering.

JOURNALISM AND COMMUNICATIONS

To enter the School of Journalism and Communications students are required to have completed the six comprehensive courses; present credit in pre-professional work—COM. 118, ES. 206, and SCH. 201; have a grade average of C or better; and a working knowledge of typewriting.

Those falling below a 2.0 grade average in University College will not be considered for admittance to the School of Journalism and Communications until they have demonstrated their ability to pursue with profit professional work in the Upper Division by satisfactorily completing one semester's work prescribed by the Director of the School of Journalism and Communications.

At least sixty-four hours, which may include four hours Military Science, are required to complete the Lower Division.

Transfer students or those with a special hour-credit problem who have not completed some of the pre-professional work in University College, may be admitted provisionally to the School of Journalism and Communications on approval of the Director. They will be *expected*, however, to complete the lower-level work.

LAW

Applicants for admission to the College of Law must have received before admission a four-year baccalaureate degree from an accredited college or university except as stated in the description of the College of Law in this Catalog. No entering law students are admitted to the Summer Session.

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*In cases where students, on the basis of superior placement test grades, are allowed to omit starred courses, they will need to take an equivalent amount of more advanced work in order to be eligible for admission to the College of Engineering at the end of the second year.

**Drawing equipment required for ML. 181, ML. 182, and subsequent courses costs approximately thirty dollars.

Although no particular courses are prerequisites, a student preparing for admission to the College of Law should obtain a thorough mastery of the basic comprehensive courses and should take also at least two courses in each of the following general fields: Accounting, Economics, English, History (American and English), and Political Science. Since concepts expressed in words are tools of the legal profession, it is essential that a student be able to read rapidly and meaningfully and to write clearly and concisely. Courses requiring the rapid assimilation and digestion of written materials and courses in expository writing therefore are recommended.

PHARMACY

In keeping with the requirements of the American Council on Pharmaceutical Education, all students expecting to earn the degree of B.S. in Pharmacy must be enrolled in one or more Pharmacy courses for a minimum of three academic years or a total of twenty-seven months. This regulation applies regardless of the number of studies completed in other fields. Upon enrolling in Pharmacy courses for the first time students must sign the register in the office of the Dean of the College of Pharmacy. Students are advised to pursue the following program:

Freshman Year and Summer Session	Hours
C-11-12, American Institutions	8
C-31-32, Freshman English	8
C-41, Practical Logic	3
C-42, Fundamental Mathematics	3
C-51, The Humanities	4
C-61, Biological Science	3
CY. 121-2, General Chemistry	8
PHY. 106, Pharmaceutical Calculations	2
Military Science; Physical Fitness	2
Total	41

Sophomore Year	Hours
C-52, The Humanities	4
C-62, Biological Science	3
PS. 201-2, General Physics	6
PS. 207-8, General Physics Laboratory	2
PGY. 221-2, Practical Pharmacognosy	6
PHY. 223-4, Galenical Pharmacy	6
CY. 123, Qualitative Analysis	3
CY. 331, Quantitative Analysis	4
Military Science; Phys. Fitness	2
Total	36

Only students having an average of C or higher will be admitted to the College of Pharmacy and/or pharmacy courses in the Upper Division. In addition, all pre-pharmacy students must have grades of C or higher in each of the following courses: C-42, CY. 121, CY. 122, PGY. 221, PGY. 222, PHY. 106, PHY. 223, and PHY. 224.

PHYSICAL EDUCATION AND HEALTH

University College students expecting to earn a degree in the College of Physical Education and Health should pursue one of the following programs:

A.—For men intending to major in Physical Education—

Freshman Year	Credits
C-11-12—American Institutions	8
C-31-32—Reading, Speaking and Writing	8
C-41-42—Logic and Mathematics	6
PHA. 284—Team Games for Men	2
PHA. 287—Gymnastics for Men	2
PHA. 291—Principles of Physical Education	3
Approved Electives	3
Military Science; Physical Fitness	2
	34

Sophomore Year	Credits
C-21-22—The Physical Sciences	6
C-51-52—The Humanities	8
C-61-62—Biological Science	6
PHA. 251—Folk, Social and Tap Dance	2
PHA. 283—Track and Baseball	2
EDF. 140-141—Aspects of Human Growth and Development	6
Military Science; Physical Fitness	2
	32

B.—For women intending to major in Physical Education—

Freshman Year	Credits
C-11-12—American Institutions	8
C-31-32—Reading, Speaking and Writing	8
C-41-42—Logic and Mathematics	6
PHA. 251—Folk, Social and Tap Dance	2
PHA. 253—Team Sports for Women	2
PHA. 255—Individual and Dual Sports for Women	2
PHA. 257—Gymnastics for Women	1
PHA. 291—Principles of Physical Education	3
Physical Fitness	0
	32

Sophomore Year	Credits
C-21-22—The Physical Sciences	6
C-51-52—The Humanities	8
C-61-62—Biological Science	6
PHA. 252—Modern Dance	1
PHA. 254—Team Sports for Women	2
PHA. 256—Swimming and Diving for Women	1
PHA. 258—Tennis and Golf for Women	2
EDF. 140-141—Aspects of Human Growth and Development	6
Physical Fitness	0
	32

C.—For men and women intending to major in Health Education—

Freshman Year	Credits
C-11-12—American Institutions	8
C-31-32—Reading, Speaking and Writing	8
C-41-42—Logic and Mathematics	6
EDF. 140-141—Aspects of Human Growth and Development	6
Approved Electives	3
Military Science or Electives	2
Physical Fitness	0
	33

Sophomore Year	Credits
C-51-52—The Humanities	8
C-61-62—Biological Science	6
*CY. 121-122—General Chemistry	8
PHA. 261—Personal Hygiene	3
SY. 244—Marriage and the Family	3
EDF. 220—Children and Culture	3
Military Science or Electives	2
Physical Fitness	0
	33

*Students planning to major in Health Education must take CY. 121-122. Students whose high school records and placement tests indicate satisfactory preparation may substitute CY. 121-122 for C-21-22. Others should take C-21, upon satisfactory completion of which they may enter CY. 121.

D.—For men and women intending to major in Recreation—

Freshman Year	Credits
C-11-12—American Institutions	8
C-31-32—Reading, Speaking and Writing	8
C-41-42—Logic and Mathematics	6
PHA. 284—Team Games for Men or PHA. 253—Team Sports for Women	2
EDF. 140-141—Aspects of Human Growth and Development	6
Military Science or Electives	2
Physical Fitness	0
	32

Sophomore Year	Credits
C-21-22—The Physical Sciences	6
C-51-52—The Humanities	8
C-61-62—Biological Science	6
PHA. 251—Folk, Social and Tap Dance	2
SY. 201—Sociological Foundations of Modern Life	3
IN. 312—Elementary School Handicrafts	3
Approved Electives	2
Military Science or PHA. 254—Team Sports for Women	2
Physical Fitness	0
	33

E.—For men and women intending to major in Physical Therapy—

Freshman Year	Credits
C-11-12—American Institutions	8
C-31-32—Reading, Speaking and Writing	8
C-41-42—Logic and Mathematics	6
C-61-62—Biological Science	6
BLY. 161-162—Biology Laboratory	4
Military Science or Electives	2
Physical Fitness	0
	34

Sophomore Year	Credits
*CY. 121-122—General Chemistry	8
C-51-52—The Humanities	8
PHA. 295—Introduction to Physical Therapy	2
PSY. 201—General Psychology	3
PSY. 205—Social Psychology or PSY. 202—Personality Development or PSY. 211—Psychological Measurement	3
Approved Electives	6
Military Science or Electives	2
Physical Fitness	0
	32

*Students planning to major in Physical Therapy must take CY. 121-122. Students whose high school records and placement tests indicate satisfactory preparation may substitute CY. 121-122 for C-21-22. Others should take C-21, upon satisfactory completion of which they may enter CY. 121.

SCHOOLS AND COLLEGES OF THE UPPER DIVISION

COLLEGE OF AGRICULTURE

The College of Agriculture is composed of three units, namely, 1. (Instruction), 2. Research (Agricultural Experiment Station), and 3. Extension (Agricultural Extension Service). The Instructional Division (The College proper) is made up of departments in the College devoted to the various phases of technical and practical agricultural work. The work of these departments is closely related, and the aim of the College is to afford students the best possible training for service in agriculture.

The departments in the College are: Agricultural Chemistry, (administered jointly with the College of Arts and Sciences), Agricultural Economics, Agricultural Engineering, Agricultural Education (administered jointly with the College of Education), Agronomy, Animal Husbandry and Nutrition, Bacteriology, Botany (including Botany and Plant Pathology), Dairy Science, Entomology, Horticulture, Poultry Husbandry, Soils, and Veterinary Science.

COLLEGE OF ARCHITECTURE AND ALLIED ARTS

The College of Architecture and Allied Arts offers programs of study leading to appropriate undergraduate degrees in Architecture, Building Construction, Interior Design, Landscape Architecture, Painting and Drawing, Commercial Art, Crafts, Costume Design, and History of Art. Programs at the graduate level are offered in Architecture, in Art, in Building Construction, and in Community Planning.

The College offers courses to students in other colleges of the University who wish to broaden their cultural background in the arts. General courses in the Department of Architecture and in the Department of Art are open to all students in the University, and certain upper division courses in the Department of Art and in the Department of Interior Design require no prerequisite training.

1955 SUMMER SESSION

During the 1955 Summer Session the College will offer most of the undergraduate courses in Architecture, Art, Building Construction and Interior Design, as well as graduate courses in Architecture, Art, and Building Construction.

The University Center of the Arts, a unit of the College of Architecture and Allied Arts, will continue its regular program of educational and illustrative exhibitions of work in the arts during the 1955 Summer Session.

TEACHERS' CERTIFICATES

The College of Architecture and Allied Arts offers courses leading to certification in Art for teaching Art in the secondary schools in the State of Florida. Regulations describing certification of teachers are published by the State Department of Education and it is imperative that all students who expect to be certified familiarize themselves with these regulations. Applications for certificate should be made immediately after graduation, and should be addressed to the State Superintendent of Public Instruction.

DEGREES AND CURRICULA

For detailed information on admission, undergraduate degrees, graduate degrees, and programs of study for the various curricula, see the University Catalog.

COLLEGE OF ARTS AND SCIENCES

The subject matter fields regularly offered to students in the College of Arts and Sciences and the extent of these offerings is indicated in the table below:

Subject	Elective Work	Group Major	Dept. Major	MA. or MS.	Ph.D.
Anthropology	X	X	X	—	—
Art	X	X	X	Graduate work offered through College of Architecture and Allied Art	
Astronomy	X	X	—	—	—
Bacteriology	X	X	X	Graduate work offered through College of Agriculture	
Biology	X	X	X	X	X
Botany	X	X	X	Graduate work offered through College of Agriculture	
Chemistry	X	X	X	X	X
Communications	X	Major and graduate work offered in the School of Journalism and Communications			
Economics	X	X	X	Graduate work offered through College of Business Administration	
Education	X	Major and Graduate work offered through the College of Education			
English	X	X	X	X	X
Family Life	X	X	—	—	—
French	X	X	X	X	—
Geography	X	X	X	X	—
Geology	X	X	X	—	—
German	X	X	X	X	—
Greek	X	X	X	—	—
History	X	X	X	X	X
Italian	X	X	—	—	—
Journalism	X	Major and Graduate work offered through the School of Journalism			
Latin	X	X	X	X	—
Library Science	X	X	—	—	—
Mathematics	X	X	X	X	X
Meteorology	X	—	—	—	—
Music	X	X	X	—	—
Philosophy	X	X	X	X	—
Physics	X	X	X	X	X
Political Science	X	X	X	X	X
Portuguese	X	X	—	—	—
Psychology	X	X	X	X	X

Religion	X	X	X	—	—
Russian	X	—	—	—	—
Sociology	X	X	X	X	X
Spanish	X	X	X	X	X
Speech	X	X	X	X	X
Zoology	See Biology listed above				

For information regarding details of these programs of study and degree requirements, the University catalog for 1954-55 should be consulted.

COLLEGE OF BUSINESS ADMINISTRATION

The summer session offerings of the College of Business Administration provide basic courses in the several curricula groupings, a selection of advanced courses to enable students to go ahead with a normal academic program and a selection of graduate courses.

A number of curricula leading to the degree of Bachelor of Science in Business Administration are offered. For complete information on the requirements for these curricula and for the graduate program, the University *Catalog* should be consulted.

COLLEGE OF EDUCATION

REQUIREMENTS FOR ADMISSION

For admission to the College of Education students will present a certificate of graduation from the University College, or equivalent, and have the approval of the Admissions Committee of the College of Education. (See General Catalog for detailed requirements).

UNDERGRADUATE PROGRAMS

Students who are preparing to teach have the opportunity of specializing in the following teaching areas: agricultural education, art, business education, elementary education, English, foreign languages, health education, industrial arts education, mathematics, physical education, sciences, social studies, and speech. (See General Catalog for curricula. For further information, consult the Undergraduate Counseling Office, Yonge 120.)

GRADUATE PROGRAMS

Graduate work in Education offers an opportunity for teachers to specialize in such areas as foundations of education (educational psychology, philosophy, human growth and development), elementary education, secondary education, agricultural education, business education, industrial arts education, school administration, supervision, guidance, junior college education, teacher education, educational research, and education for the exceptional child. (See General Catalog for requirements).

NOTE: Orientation Meeting for *all* graduate students in Education, Thursday, June 23, 7:00 P.M., in Yonge Auditorium. This meeting will be devoted to a discussion of policies and programs for graduate students in the College of Education.

CERTIFICATION OF TEACHERS

The curricula in the College of Education include State certification requirements. Each student should consult his counselor to plan a sequence of courses to meet requirements for his degree and for certification.

For further information concerning the certification of teachers, write to the State Department of Education, Tallahassee, Florida, requesting *State Board Regulations Relating to Florida Requirements for Teacher Education and Certification*, April 3, 1951, revised July 21, 1953.

EXTENSION OF CERTIFICATES

The following more important items govern the extension of certificates:

1. The certificate must be valid at the close of the summer term attended and at the time formal application for extension is made.
2. The applicant must pass at least six semester hours in which no grade is below C.
3. Students who desire an extension of certificate should apply for the same to the Registrar, Room 33, Administration Building prior to July 10. Name of students who are eligible for an extension will be presented to the State Department of Education. Students should indicate exactly the name that appears on the certificate which they wish to have extended.
4. Certificates to be extended must be sent by registered mail to T. D. Bailey, State Superintendent of Public Instruction, Tallahassee, Florida, within a year after the close of the summer term, otherwise extension will not be granted.

EDUCATIONAL PLACEMENT OFFICE

The Educational Placement Office serves both former students of the University and public school officials, without charge. The Office keeps up-to-date records on registrants for positions and a current list of educational administration and teaching vacancies. Persons who wish this service should communicate with the Educational Placement Office, Yonge 120.

THE P. K. YONGE LABORATORY SCHOOL

The summer term of the Laboratory School will extend from June 20 through July 29. Children of Summer Session students and all others are eligible for enrollment. Classes from the kindergarten through the sixth grade will be held. The fees are $2. for University registration and $5. for expendable materials.

Parents will register pupils Monday, June 20, 9:00 to 10:30 A.M., in the first floor hall of the elementary wing of the Yonge building. Teacher-parent conferences will be held on Monday, June 20, and parents should not be accompanied by their children.

Application for admission should be made at the Laboratory School Office, 218 Yonge Building, as soon as possible since the number who may be admitted is limited.

COLLEGE OF ENGINEERING

The College of Engineering is offering several courses during the Summer Session in various departments so that students may graduate in a minimum time. Many other courses included in the engineering curricula, such as mathematics and physics, are also available. During the summer months the engineering student may also take subjects to meet elective requirements.

Students entering the University for the first time may find it to their advantage to enroll in mathematics, freshman English, American Institutions or General Chemistry and an appropriate engineering prerequisite. Students having completed one year at the University may take courses in calculus and physics. For those students who have completed calculus and physics, statics, dynamics and strength of materials are suggested. Elective subjects in mathematics, physics and the humanities are recommended to all students.

Students who contemplate registration in the College of Engineering and those who are already registered in this college should confer about their schedules with the department heads and the dean as soon as possible.

SCHOOL OF FORESTRY

Courses in Forestry are offered during the Summer Session. The required Summer Camp should be taken between the second and third year's work provided the necessary prerequisites have been completed. Students who contemplate registration in the School of Forestry should consult the University Catalog for courses which are prerequisites or are required in the Forestry curriculum.

SCHOOL OF JOURNALISM AND COMMUNICATIONS

A UNIT OF THE COLLEGE OF ARTS AND SCIENCES

The curricula in the School of Journalism and Communications lead to the degree Bachelor of Science in Journalism or Bachelor of Science in Communications.

The programs provide students with a broad background in liberal arts and sciences—literature, economics, history, political science, sociology, psychology—which are vital aspects of contemporary life and essential to those entering professional careers in printed media or audio-visual media of communications.

The general plan of education in this School is arranged so that the student spends about three-fourths of his time on general background courses. The remaining fourth involves the acquisition and practice of professional techniques in relation to this background knowledge.

Students entering the School of Journalism must choose one of the programs of study.

Those majoring in the Editorial and Public Relations fields will take the Journalism program and earn the BSJ degree. Two degrees are offered in the Advertising program: those interested in printed media will earn the BSJ degree, and those specializing in audio-visual media will earn the BSC degree. Students interested in Radio-TV will register for the Communications program and earn the BSC degree.

COLLEGE OF LAW

1. The beginning courses in Law are not offered in the Summer Session, hence students are not admitted in June unless they have completed satisfactorily at least one semester of work in an accredited law school.
2. A student wishing to transfer from another accredited law school who, at the time of beginning his study of law, qualified for admission to this College under the stated requirements for beginning students (other than the Law School Admission Test) and who has maintained a scholastic average of C or higher on all previous law school work undertaken, may apply for admission with advanced standing. Courses completed

with a grade of C or higher in other accredited law schools will be accepted for credit up to but not exceeding a total of thirty hours.

3. Applicants for admission must have received before admission a 4-year baccalaureate degree from an accredited college or university, except in the case of veterans, who will be admitted after they have completed 94 hours of satisfactory work in an accredited college or university if they have maintained a scholastic average of C or higher on all work undertaken.

COLLEGE OF PHARMACY

The Summer Session offerings of the College of Pharmacy, a unit in the J. Hillis Miller Health Center, provide three courses in the Lower Division, several courses in the Upper Division and two graduate courses. In addition, graduate students will be given guidance in research leading to the M.S. and Ph.D. degrees.

For complete description of the courses and requirements for admission and graduation the student should consult the University Catalog.

COLLEGE OF PHYSICAL EDUCATION AND HEALTH

GENERAL STATEMENT

The College of Physical Education and Health offers programs of instruction and services under five departments, namely, Health Service, Intramural Athletics and Recreation, Required Physical Education for Men, Required Physical Education for Women, and The Professional Curriculum.

THE PROFESSIONAL CURRICULUM

ADMISSION REQUIREMENTS

For admission to the College of Physical Education and Health students must present a certificate of graduation from the University College, or the equivalent, and have the approval of the Admissions Committee of the College of Physical Education and Health. (Consult the 1955-56 University *Catalog* for detailed requirements).

UNDERGRADUATE DEGREES

The College of Physical Education and Health offers four undergraduate degrees: The Bachelor of Science in Physical Education, The Bachelor of Science in Health Education, The Bachelor of Science in Recreation, and The Bachelor of Science in Physical Therapy. For complete information concerning the several curricula and the requirements for these degrees, the University *Catalog* for 1955-56 should be consulted.

GRADUATE DEGREE

Courses are offered by this College in the Graduate School leading to the degree of Master of Physical Education and Health with a major in physical education. Admission and degree requirements for graduates of accredited institutions are described under the Graduate Division section of this *Catalog*.

Graduates of non-accredited institutions, in order to do graduate work in the College of Physical Education and Health must either make a minimum score of 555 on the National Teacher Examination or they must complete a semester of undergraduate work at the University of Florida with a grade average satisfactory to the Graduate Admissions Committee of the College of Physical Education and Health.

THE GRADUATE DIVISION

THE GRADUATE SCHOOL

ADMINISTRATION

The Graduate School consists of the Graduate Dean, the Graduate Council, and the Graduate Faculty. The Graduate School is responsible for the standards of graduate work in the University and for coordination among the graduate programs of the various colleges and divisions of the University. The responsibility for the detailed operation of the graduate programs is vested in the respective colleges and divisions through their deans and established graduate committees.

ADMISSION TO THE GRADUATE SCHOOL

Limitations of space and staff restrict the enrollment of graduate students. The records of applicants for graduate study are reviewed by the graduate selection committees of the various colleges and schools. In general no student will be considered for graduate study in any unit of the University who is a graduate of a non-accredited institution.

Members of the faculty of the University of Florida with a rank of assistant professor (or equivalent) or above cannot receive a graduate degree from this institution. This does not prohibit such faculty members from registering for course work in the Graduate School, nor from using such credits upon a graduate degree conferred by some other institution.

All admissions are granted on the condition that students must be responsible for becoming informed of all rules, regulations, and requirements; for complying with all official procedures; and for fulfilling all course and degree requirements.

In general, unqualified admission to the Graduate School for study toward all degrees except those in the College of Education and the College of Physical Education and Health is dependent upon presentation of an undergraduate record from an accredited college or curriculum with an average grade of "B" for the junior and senior years. If the student's undergraduate grades do not meet this standard he may be granted qualified admission as a fifth year student through the college of his choice. If so accepted by the college he will be given a program of about 15 semester hours involving advanced undergraduate courses and including not more than six semester hours of graduate work. Upon completion of this program with an average grade of "B" the student will be given unqualified admission to the Graduate School. Up to 12 hours of the trial program may be credited to his graduate record. The trial program will not be continued beyond the original planned period. In some units of the University, an undergraduate average considerably above "B" is required for admission.

Admission for study toward the degree of Master of Arts in Education, Master of Education, or Master of Physical Education and Health for a graduate of an accredited college may be approved on any one of the following bases:

(1) A 2.5 grade-point average, as calculated at the University of Florida, for the last two years of undergraduate work including at least 60 semester hours.

(2) A score of 555 or above obtained on the National Teacher Examination taken prior to admission, or when taken during the first semester of

registration under provision (3). Course work taken concurrently while obtaining a satisfactory NTE score may be counted where applicable on a graduate program.

(3) Completion of 15 semester hours of a planned and approved trial program while registered as a fifth year student at the University of Florida with an honor point average of 3.0 or above. Not more than 9 semester hours of this work can be taken in courses numbered 600 and above. If the student makes an honor point average of 3.0 or above, upon the approval of the Graduate Committee of the College up to 15 semester hours of his trial program may be credited to his graduate record.

In Agriculture, normally only those students who have maintained at least an honor-point average of 2.5 in their upper division work and 3.0 in their major subject will be considered for admission to the Graduate Division. For students with an undergraduate major in general agriculture, the minimum upper division average is 2.75. In exceptional cases, when a candidate has demonstrated in some other way his fitness to do graduate work, as for instance outstanding achievement since earning the bachelor degree, he may be considered for admission.

DEGREES OFFERED

Non-thesis Degrees

Master of Agriculture with major studies in any field in Agriculture;
Master of Education, with major studies in any field in Education including Business Education and Industrial Arts Education;
Master of Physical Education and Health.
Specialist in Education.

Thesis Degrees

Master of Business Administration, with major studies in one of the following departments:

Accounting
Business Organization and Operation
Real Estate

Master of Science in Agriculture, with major studies in one of the following departments:

Agricultural Economics
Agricultural Education
Agricultural Engineering
Agronomy
Animal Husbandry and Nutrition
Bacteriology
Botany
Dairy Science
Entomology
Horticulture
Plant Pathology
Poultry Husbandry
Soils

Master of Science in Building Construction
Master of Science in Community Planning
Master of Science in Engineering with major studies in one of the following departments:

Aeronautical Engineering
Engineering Mechanics

Chemical Engineering
Civil Engineering
Electrical Engineering
Industrial Engineering
Mechanical Engineering

Master of Science in Forestry

Master of Science in Pharmacy, with major studies in one of the following departments:
Pharmacy
Pharmacognosy
Pharmacology
Pharmaceutical Chemistry

Master of Science, with major studies in one of the following departments:
Bacteriology
Biology (Zoology)
Botany
Cancer Research
Chemistry
Entomology
Geography
Mathematics
Physics
Plant Pathology

Master of Fine Arts
Crafts
Painting and Drawing

Master of Arts in Architecture
Architectural Design
Building Construction

Master of Arts in Education, with major studies in one of the following departments:
Education
Business Education
Agricultural Education
Industrial Arts Education

Master of Arts, with major studies in one of the following departments:
Economics
English
French
Geography
German
History
Inter-American Area Studies
Journalism
Latin
Mathematics
Philosophy
Political Science
Psychology
Sociology
Spanish
Speech

Doctor of Education

Doctor of Philosophy, with major studies in one of the following departments:
Agricultural Economics
Agronomy
Animal Husbandry (Nutrition)
Biology (Zoology)
Cancer Research
Chemical Engineering
Chemistry
Economics
Inter-American Area Studies
Mathematics
Pharmacy, including
Pharmacy
Pharmacology
Pharmacognosy
Pharmaceutical Chemistry
Physics

Economics and Business Administration, including
Accounting
Business Organization and Operation
Real Estate
Electrical Engineering
English
History
Horticulture
Plant Pathology
Political Science
Psychology
Sanitary Engineering
Sociology (Latin-American)
Soils
Spanish
Speech

THE MASTER'S DEGREE

Maximum Registration.—Nine semester hours is the maximum graduate load for summer registration. Part-time employment of any kind reduces this load. Full-time employees may register for 3 semester hours; one-third or one-half time graduate assistants may register for 6 semester hours; full-time students may register for 9 semester hours but candidates for thesis degrees are limited to 7 credit hours of course work plus registration in 699 or 799.

Time Limit.—All work for the master's degree must be completed within seven years from the time of first registration.

Residence Requirement.—For any master's degree, the student must spend at least one full-time academic year at the University or the equivalent thereof, as a graduate student.

Summer Session Residence.—If the work for the master's degree is done in the summer, four eight-week summer sessions will satisfy the residence requirement. *Transfer of work from another institution or use of extension or other non-resident credit where accepted by the college concerned and the Graduate Council may be permitted to reduce the full-time residence to but not below three eight-week summer sessions.* The candidate must be in residence the term at the end of which the degree is awarded, unless other arrangements are specifically approved by the Graduate Council.

Transfer of Credits.—Under certain conditions transfer of a limited number of credits to the University will be allowed, but the final acceptance of credits from other institutions is subject to the recommendation of the student's supervisory committee and the approval of the Graduate Council.

Pre-Baccalaureate Registration for Graduate Credit.—An undergraduate student at the University of Florida who has less than one semester of unfinished course work for the bachelor's degree may request in writing through the Dean of the appropriate College approval of the Dean of the Graduate School, of course registration applicable for graduate credit. Such approval can only be given to undergraduate students who have maintained a B record in the Upper Division and whose total proposed semester program does not exceed 15 hours in a regular semester or 6 hours in a summer term. Commonly, courses to be approved should be of full graduate caliber. Approval of an advanced undergraduate course will be restricted to one not normally a part of the undergraduate program prerequisite to the graduate studies to be undertaken. For application to a

specific advanced degree the course work taken must be earned with grade of "A" or "B" and be recommended for transfer to the student's graduate record by his supervisory committee after he has been admitted to the Graduate School. Courses beyond the requirement of the Baccalaureate Degree that are taken without such approval are not eligible for transfer as graduate credit. Background work required for a change of emphasis should be taken without graduate credit.

National Teacher Examination.—All graduate students carrying programs in Education are required to undergo a comprehensive examination. At the present time the National Teacher Examination is used. The purposes of the examination are two-fold: (1) to provide additional data to be used in counseling and guiding students, and (2) to be one of the factors in determining the fitness of the student for admission to the Advanced School. A fee for the National Teacher Examination is charged each student doing graduate work in Education, payable with other fees at the time of registration. The fee is $7.00 for full-time students or $11.00 for part-time students. The examination is given early in each semester and prompt application is necessary.

Admission to Candidacy.—Admission to candidacy for an advanced degree and the award of such a degree shall depend among other requirements upon maintainance for all courses taken in the fields of the major and minor studies of an average grade of "B." Any grade of "incomplete" in the fields of the major and minor studies shall be removed by completing all required work unless a grade point average of 3.0 is maintained including the hours of incomplete courses. Grades in courses numbered 699 and 799 are not considered in meeting this requirement.

MASTER'S DEGREE WITHOUT THESIS

MASTER OF EDUCATION

Description and Purpose.—This degree is designed for the professional preparation of teachers, rather than for research. The program has been planned to develop in public school workers a wide range of essential abilities and to give them a broad background of advanced general education, rather than to encourage them to specialize narrowly. While not neglecting to add to the qualifications already attained, it further aims to overcome weaknesses in the student's development.

The Master of Education program seeks to develop the student in:

1. An understanding of the nature of the individual and the learning process;
2. An understanding of the purposes, issues, and trends of education in American democracy;
3. An understanding of the social realities of our time and how these condition the educative process;
4. A comprehensive, internally consistent pattern of values in keeping with our democratic traditions; a value-system which the student can apply where issues are concerned;
5. A personal philosophy of education which he can make explicit and which is consistent with his value patterns;

6. The ability to think and act creatively and adequately within his area of specialization or field of work, i.e., to see new problems, to work out solutions, and to communicate the results of his thinking and acting to others.

Transfer of Credits.—If recommended in advance by the Graduate Committee and approved by the Dean of the Graduate School, a student may be permitted to study in other institutions to the extent of (but not to exceed) six semester hours. No graduate credits earned prior to admission to the University may be transferred without special recommendation of the Graduate Committee and the approval of the Graduate Council. No more than six semester hours of credit may be thus transferred.

Work Required.—Instead of having a fixed requirement of majors and minors, each student will be required to submit a plan of study which shows a reasonable amount of balance and direction. The planned program is approved by the student's counselor, with whose assistance, the plan is first developed, then by the Education department head concerned and the Office of Graduate Studies in Education. After the program has been developed, any changes must be requested in writing and similarly approved.

Minimum course requirement is 36 semester hours, of which not more than nine may be taken in any summer term (six in six weeks, three in three weeks), and not more than fifteen in any one semester. Six semester hours of workshop or extension courses may be allowed and will count as residence credit. At least 50 per cent of the minimum course requirements shall be from courses numbered 600 and above.

Courses designated as field laboratory courses may be taken to the extent of six semester hours of credit. It should be noted, however, that the University imposes a limit of 12 hours of credit in the aggregate on work allowed from (a) off-campus workshops and extension courses, (b) field laboratory courses, and (c) courses transferred from other institutions.

Where the student has had no previous work in professional courses in Education he must have completed a minimum of 36 hours of professional work in Education including work at the graduate and undergraduate level in order to qualify for this degree. Students planning to take work in closely related fields should consult their counselors as to the acceptability of such work toward meeting this requirement. In general, a minimum of twelve semester hours outside the field of Education is required.

A thesis is not required.

A reading knowledge of a foreign language is not required, but the effective use of the English language is expected of all candidates. Admission to the work of this program is not a guarantee that the student will be admitted to candidacy for the degree.

Admission to Candidacy.—The faculty makes a determination as to the competence of the student at the time of his admission to candidacy. Admission to candidacy for the Master of Education degree may be recommended to the Graduate Council by the Graduate Committee on the basis of an unassembled examination to be given at the end of from 12 to 18 semester hours of graduate

work at the University of Florida. The unassembled examination is evaluated by a committee of the faculty, which may recommend supplementary oral and/or written examinations for students whose admission to candidacy is in doubt.

The unassembled examination includes: (1) the student's academic record to date, (2) the student's scores on the *National Teacher Examination*, (3) evidence of competency in the use (oral and written) of the English language, (4) evaluation of personal qualities and promise of professional attainment by persons to whom the applicant's record is known, (5) the student's experience record, and (6) any other appropriate information.

The unassembled examination is administered through the Office of Graduate Studies in Education for the Graduate Committee.

The student's remaining program of study will be planned in terms of needs as revealed in the Admission to Candidacy Examination. On approval of the Graduate Committee, the candidate will be recommended for the degree upon the satisfactory completion of the designated course work.

The candidate must have completed at least one year of teaching prior to taking the last six semester hours of work, or must have included in his record the satisfactory completion of an internship program or a minimum of six semester hours of student teaching.

The Graduate Committee of the Department of Education.—A special counselor is appointed for each student in the Master of Education program. His work is under the general supervision of the Graduate Committee in the Department of Education. The program is administered through the Office of Graduate Studies in Education.

MASTER OF AGRICULTURE

The degree of Master of Agriculture is designed for those students who wish additional training before entering business occupations or professions, rather than for those interested primarily in research. The basic requirements, including those for admission, residence, supervisory committee, plan of study and admission to candidacy, are the same as for the Master of Science in Agriculture degree, as outlined elsewhere, but the work requirements are made to conform to the specific objectives of this degree.

Work Required.—A minimum of thirty-six semester hours of course work shall be required, at least eighteen of which shall be designated strictly for graduates. Each student's program is designed to take into account the qualifications and needs of the individual and is subject to the approval of the supervisory committee. A thesis is not required, but the student must submit reports, term papers, and records of work accomplished. A *comprehensive written qualifying examination*, given by his supervisory committee, covering his major field of work is required before the beginning of the second semester of work. Failure to qualify in this examination will result either in the student's elimination from the program or in the taking of the additional course work indicated. A *final oral examination* by the supervisory committee covering the whole field of study of the candidate is required.

For further details, inquire of the Dean of the College of Agriculture.

MASTER OF PHYSICAL EDUCATION AND HEALTH

Work Required.—A minimum of thirty semester hours of course work is required, at least fifteen of which must be courses in the fields of Physical Education, Health Education or Recreation designated strictly for graduates or courses numbered 500 and above if approved for graduate major credit. Of the remaining fifteen hours, at least nine semester hours must be taken in courses outside the College of Physical Education and Health. At least 50 per cent of the minimum course requirements shall be from courses numbered 600 or above.

Supervisory Committee.—A committee of five members of the faculty of the College of Physical Education and Health, with the Dean of the College or some person designated by him serving as chairman, and the Dean of the Graduate School as *ex-officio* member, will supervise the work of students registered in this program, subject to the approval of the Graduate Council.

Admission to Candidacy.—Admission to the work of this program is not a guarantee that the student will be admitted to candidacy for the degree. The student will be required to pass a written and/or oral examination in addition to being recommended by the supervisory committee for admission to candidacy. This examination should be taken by the end of the student's first semester of residence.

Final Examination.—A thesis is not required but the candidate must pass a final examination at the close of his course work. This written and/or oral examination will be administered by the supervisory committee and will be confined largely to the student's major field of study.

MASTER'S DEGREE WITH THESIS

Work Required.—The work for the master's degree shall be a unified program with a definite objective, consisting of thirty semester hours of registration, including not less than twenty-four hours of course work plus six hours in Research and Thesis. At least one-half of the required twenty-four hours of course work shall be in a single field of study designated as the major and the remainder, or minor, in related subject matter. One six-hour minor is required; two six-hour minors or one twelve-hour minor may be taken. Minor work must be from a department other than the major. In special cases, this requirement may be modified upon written authority of the Dean of the Graduate School. The work in the major field shall be in courses designed strictly for graduates, or if approved by the Graduate Dean, in courses designed for advanced undergraduates and graduates. In minor work courses numbered 300 and above may be taken. All work must be approved by the student's supervisory committee.

At least fifty per cent of the minimum course requirements shall be from courses numbered 600 and above.

Thesis.—In addition to the course work the student will be required to prepare and present a thesis (or equivalent in creative work) acceptable to the Supervisory Committee, the Dean of the Graduate School and the Graduate Council. The candidate should consult the Dean's office for instructions concerning the

form of the thesis. The original copy of the thesis bound in temporary binding and accompanied by three copies of a brief abstract of the thesis must be in the Dean's office on or before the dates specified in the University Calendar. The original copy together with the first carbon will be deposited in the Library if the thesis is accepted.

Language Requirement.—(1) A reading knowledge of a foreign language is left to the discretion of the student's supervisory committee or the college concerned. When a foreign language is required the examination will be conducted by the Department of Foreign Languages. This requirement must be satisfied before the student is admitted to candidacy. A student in the regular session must pass the language examination by *April* 20 if he expects to graduate at the end of the summer term of that year. In case the student is completing all his work in the summer terms, the foreign language reguirement must be satisfied before the beginning of the fourth summer term. If the student is majoring in a foreign language, that language cannot be used to satisfy this requirement. (2) The effective use of the English language as determined by the student's supervisory committee is required of all candidates for the master's degree.

Supervisory Committee.—A special supervisory committee consisting of not less than three members will be appointed for each student by the Graduate Dean upon the recommendation of the college concerned. The supervisory committee should be appointed as early as possible after the student is admitted and in general not later than the end of the first semester of study. The Dean of the Graduate School is *ex-officio* member of all supervisory committees. The duties of the supervisory committee are given under several of the items relating to the requirements for master's degrees.

Admission to Candidacy.—Whether an applicant has been provisionally admitted or regularly admitted, his supervisory committee or official counselor shall review his entire academic record at the end of his first semester or summer session of residence work. In addition to the approval of the committee, a formal vote of the principal department concerned will be necessary to admit the applicant to candidacy, to fix definitely the additional residence and course requirements, and to approve the program the applicant has submitted. Application for Admission to Candidacy must be made on a special form supplied by the Dean's office. This is done when the candidate has completed about one-half of his course work. In the College of Education, candidates for advanced degrees, or advanced teaching certificates, should consult the Office of Graduate Studies in Education for additional information affecting admission to candidacy.

General Examination.—It will be the duty of the Special Supervisory Committee, when all work is complete or practically complete, including the regular courses and the thesis, to conduct a general examination, either written or oral or both, to embrace: (1), the thesis; (2), the major subject; (3), the minor or minors; (4), questions of a general nature pertaining to the student's field of study. The Committee shall report in writing to the Dean not later than one week before the time for the conferring of the degree whether all work has been completed in a satisfactory manner and whether the student is recommended for the degree.

Special Thesis Abstract Required.—At the request of the State Department of Education of the State of Florida, the College of Education requires all candidates for the degree of Master of Arts in Education to prepare a 750 word abstract of the thesis which is forwarded to the State Department for informational purposes.

THE ADVANCED SCHOOL OF THE COLLEGE OF EDUCATION

The Advanced School of the College of Education offers two degrees, the degree of Specialist in Education and the Doctor of Education degree. Work in the Advanced School will be available only to those who have shown a high degree of ability in their first year of graduate work. The purpose of the Advanced School is to develop leadership, research competency, and specialization.

Admission to Advanced School.—Admission to the Advanced School will open only to persons who have:

1. Completed two school years of successful professional experience;
2. Successfully completed thirty-six hours in education.

Admission to the Advanced School will be based on the following criteria:

1. High scholastic average during the fifth year work (3.5 grade point average or above as computed at the University of Florida will be considered evidence of good scholarship);
2. Results from the National Teacher Examination;
3. Results from the Miller Analogies Test;
4. An oral examination administered by the department in which the student seeks to specialize;
5. Special interviews for individuals for whom the department of specialization seeks more data.

The judgment concerning admission of an individual student will be based on a consideration of a student's performance in all of these areas by the department in which the student desires to specialize. The department will certify to the Admissions Committee that the student has met the criteria for admission to the Advanced School.

In all cases the record, experience, and personal qualifications of the person applying for admission are subject to the approval of the Admissions Committee.

Where possible, students should seek admission to the Advanced School before enrolling in any courses beyond the master's degree. Where this procedure is impossible, the student will register in the graduate school and during the first semester of his work beyond the master's degree apply for admission to the Advanced School. If such candidate is found to be eligible the work taken during that term will be included in the planned program.

After completion of the fifth year any student approved by the Admissions Committee may register for courses but admission to the Advanced School must be obtained before work may be counted for degrees or certificates above the master's level.

Specialist in Education Degree.—If the student chooses the Specialist in Education program he will plan a minimum thirty-six hour program with his counselor. A maximum of six hours of transferred credit may be included.

The planned program of specialization must include at least twenty-four hours in courses open only to graduate students and the remainder in courses open to graduate and undergraduate students. The student may specialize in any of the established areas of the College of Education.

A thesis is not required. Emphasis will be placed upon the use of research rather than upon the development of skills in research techniques.

Admission to the Advanced School plus successful completion of one semester of work of his planned program will automatically constitute admission to candidacy for the Specialist in Education degree.

At the end of the thirty-six hour program the student will be given a final examination both written and oral by a committee selected by the head of his area of specialization. Upon passing the examination the candidate will be awarded the Specialist in Education degree upon the approval of the faculty, and the Graduate Council.

The Ed.S. is planned as a terminal degree. If at the end of his program the student wishes to work for the Ed.D he must meet the requirements stated for that degree.

Time Limit.—All work for the Specialist in Education degree must be completed within seven years from the time of first registration.

DOCTOR OF EDUCATION

The Doctor of Education degree is designed to develop scholarship and leadership in the field of Education. Each doctoral candidate is expected to achieve competence in the broad field of Education and in an area of specialization in which adequate supervision is available.

Administration of the program leading to this degree is cared for through the Office of Graduate Studies in Education, which carries out the policies of the Graduate School and the Graduate Committee of the College of Education. This office is located in Room 202, P. K. Yonge Building.

Admission to a program of work leading to the degree of Doctor of Education requires admission to the Advanced School of the College of Education, previously described, as well as admission to the Graduate School of the University of Florida.

Minors.—Minor work, or work in cognate fields is required. If one minor is selected, at least 18 hours of work therein will be required; if two minors are chosen, one must have at least 12 hours of course work, the other at least six. Minors may not be taken in any branch of Education.

In lieu of a minor or minors, the candidate may present a suitable program of not fewer than 18 hours of cognate work in fields other than Education. This program must have the approval of the student's supervisory committee. The College of Education faculty will expect the candidate to be prepared to answer questions, at the time of his oral examination, in any of the areas so chosen.

Admission to Candidacy.—Admission to Candidacy for the degree of Doctor of Education rests on successful completion of the qualifying examination and the satisfactory presentation of the candidate's thesis proposal at a special doctoral seminar. Recommendation to the Graduate School for admission to candidacy is based on action of the supervisory committee, subject to the approval of the Graduate Committee of the College of Education.

The Qualifying Examination.—The applicant is recommended for the qualifying examination by his supervisory committee after he has completed sufficient course work and the research preparation requirements of the College of Education.

The examination consists of (1) a general-professional section, administered by the Graduate Committee of the College of Education to all applicants; (2) a field of specialization section administered by the department or faculty groups concerned; (3) examination in the minor or minors, where involved; and (4) an oral examination conducted by the applicant's supervisory committee.

The Seminar.—Each student is expected to develop a thesis project to be considered by a general doctoral seminar in the College. Participants in the seminar will be faculty members of the college, other advanced students, and members of the supervisory committee. At the conclusion of the seminar the supervisory committee will report thereon to the Graduate Committee of the College of Education.

Research Preparation Requirement.—This requirement is satisfied by meeting the requirements in both Group 1 and Group 2 below:

Group 1.—(1) a course in Educational Research (EDF 760) and
(2) The *library usage* examination (usually given in connection with EDF 760 at the University of Florida), and
(3) a basic course in *statistics* (EDF 360, or PSY 211, or MS 310, at the University of Florida)

Group 2.—either

(1) a reading knowledge of one foreign language relevant to the student's needs, *or*
(2) one of the following measurements, statistics, or research courses: SY 547 or 670; EDF 660 or PSY 605; EDS 605 or EDE 702; EDF 650; PSY 503, 504, 632, or 743; PHA 605 or 510

There is no language requirement for the Doctor of Education degree. Courses taken at other institutions which may be the equivalent of course requirements indicated above may be considered, on recommendation of the applicant's supervisory committee.

Abstracts.—For the purpose of inclusion in a summary of research studies in Education, published by the College of Education, the candidate must supply one 1500-2500 word abstract of his dissertation, in addition to such other abstracts as may be required by the Dean of the Graduate School.

For information relating to *Residence, Time Limit,* the *Supervisory Committee,* the *Dissertation, Publication of the Dissertation,* and the *Final Examination,* the student is referred to the material presented under the heading DOCTOR OF PHILOSOPHY. These statements are applicable to both degrees.

DOCTOR OF PHILOSOPHY

Distribution of Work.—Two-thirds of the student's time is usually spent upon his major subject and the dissertation, and about one-third on his minor or minors. The student will be guided in his whole course of study by the professor of his major subject and by his special supervisory committee. The Graduate

Council does not specify just what courses or how many courses will be required. Doctoral work is mainly research, and the student is thrown largely upon his own responsibility.

Candidates in Agronomy, Animal Husbandry, Horticulture, Plant Pathology, and Soils may do their research at certain branch stations of the University of Florida Agricultural Experiment Station where adequate staff and facilities are available.

Minors.—The student must take at least one and not more than two minors.

Supervisory Committee.—The Supervisory Committee for a candidate for the doctor's degree should consist of at least five members, chosen from the Graduate Faculty. At least three members should be from the college or department recommending the degree. In addition one or two members from a different educational discipline should be recommended for the purpose of coordination between colleges or disciplines and to represent the students minor or minors. Supervisory Committees are nominated by the department head (in no case by the student), approved by the Dean of the College and appointed by the Dean of the Graduate School. It is recommended that the Supervisory Committee be appointed as early as possible after the student is admitted and in general not later than the end of the first semester of study. The Graduate Dean is an *ex officio* member of all supervisory committees.

Duties of the Supervisory Committee are as follows:

1. To inform the student of all regulations governing the degree sought.
2. To meet as a committee immediately after appointment to pass on the qualifications of the student and to prepare with the student a written program of study meeting major and minor requirements, languages, residence, etc.
3. To meet at an appropriate time to approve the proposed subject of the dissertation and to approve a projected program leading to its completion.
4. To meet as a Committee of Examination to arrange for the written examination and to conduct the oral qualifying examination.
5. To meet as a committee when the work on the dissertation is at least one-half completed to review the procedure, progress and expected results and to make suggestions for its completion.
6. To meet as a committee when the dissertation is completed to conduct the final oral examination primarily but not exclusively on the subject of the dissertation and to satisfy itself that the result is a piece of original research and a contribution to knowledge in the field of research scholarship.

Language Requirement.—(1) The languages normally required for the Ph.D. degree are German and French. In each case a reading knowledge must be established by examination. If the supervisory committee believes that another Romance language would be more appropriate than French in the program of a particular student, it may advise the Graduate Council in writing to the Dean of its reasons for recommending such a substitution. The substitution of a Romance language for German is not permitted. Any other substitution for German should be recommended only on the basis of the use to be made of the substitute language in the preparation of the thesis. Council action for any language substitution must be obtained before the language examination is taken.

(2) As an alternative to a reading knowledge of two foreign languages, a student, with the approval of the supervisory committee and the college concerned, may demonstrate a functional knowledge of one foreign language and purposeful use of that language in preparation of the dissertation. Functional knowledge is defined as ability to read, write and speak the language involved. The language shall not be the native language of the student, but it may be English for a foreign student whose native language provides extensive research material in his major field. In each case, a petition to the Graduate Council must clarify the points mentioned if alternative (2) is selected.

(3) As a second alternative within departments individually approved by the Graduate Council, a study of mathematics may be substituted for a reading knowledge of one foreign language. When this substitution is chosen, the courses in mathematics taken for this purpose shall not be considered to be a part of the major or minor studies. The degree of proficiency in mathematics shall be determined as follows:

(a) For a field in which calculus is not required through the Master's degree, the student shall take and pass with grade B or higher the final examination in MS 354 and any other course in the Department of Mathematics specified by his Supervisory Committee. Under this provision, mathematics may be substituted for one foreign language in Business Administration and in Agricultural Economics.

(b) For a field in which calculus is required as a part of the Bachelor's or Master's program, the student shall either pass with grade of B or above or demonstrate equivalent proficiency by written examination in six semester hours of work in the Department of Mathematics requiring MS 354 as a normal prerequisite.

The Department of Foreign Languages will certify to the Graduate School the competency of each student in the required foreign languages whether established by examination on the campus or elsewhere. The language requirement should be met as early as possible in the student's program and must be satisfied before the applicant can be admitted to the qualifying examination.

Residence—(1) A minimum of three academic years of graduate work on a full-time basis beyond the baccalaureate degree completed at institutions approved by the Graduate School is required for the degree of doctor of philosophy. Either the second or third academic year of the three-year program shall normally be spent in full-time study on the campus at the University of Florida. (2) In fulfilling the requirements of resident study of paragraph (1) part-time study to the extent permitted will be evaluated on the basis of proportionate credit hours assuming 15 credit hours of any approved combination of course work and research to represent a full graduate study load. For part-time study when recommended by the Supervisory Committee a total of 30 semester hours in a calendar year or 35 semester hours of graduate courses and research encompassed within four successive registrations (i.e., normally three successive semesters plus the intervening summer school, or as an alternate choice the use of four successive semesters without summer registration) completed successfully while engaged in resident study on the campus of the University of Florida may be accepted by the Graduate School as meeting this requirement. An overload program, even when approved, will be valued as a normal program for this purpose. Since a

teacher while fully employed cannot meet this requirement of continuous intensive study, fellowships and assistantships are made available wherever possible to doctoral candidates. (3) Between the qualifying examination and the conferring of the degree, there must elapse a minimum interval of one academic year in full-time residence, or one full calendar year if the candidate is on less than full-time basis.

Qualifying Examination.—The qualifying examination, which is required of all candidates for the degree of Doctor of Philosophy, may be taken during the second term of the second year of residence. The examination conducted by the special supervisory committee is both written and oral and covers the major and minor subjects. The oral examination coming after the language examination and the written part of the qualifying examination gives the Supervisory Committee an opportunity to reach a conclusion as to the advisability of pursuit of the Ph.D. degree.

If the student fails in his qualifying examination, he will not be given another opportunity unless for special reasons a re-examination is recommended by his Supervisory Committee and approved by the Graduate Council.

Time Limits.—All work for the Doctor's degree must be completed within five calendar years after the date of the qualifying examination or the examination must be repeated.

Admission to Candidacy.—A regular graduate student who wishes to become a doctoral candidate must be approved for candidacy by his supervisory committee, the head of the major department, the college dean and the graduate dean. The approval must be based on (1) the academic record of the student, (2) the opinion of his supervisory committee concerning his overall fitness for candidacy, and (3) a qualifying examination, the nature of which is determined by the major and minor departments. This evaluation is to be made toward the end of the second year or the beginning of the third year of equivalent full-time residence.

Dissertation.—A satisfactory dissertation showing independent investigation and research is required of all candidates. Since all doctoral dissertations will be published either by microfilm, microcard or as a monograph it is necessary that the research be of publishable quality and that the dissertation be in appropriate form for publication. The original copy of the dissertation must be presented to the Graduate Dean on or before the date specified in the University Calendar. The sum of $50.00 should be deposited with the Business Manager to cover the cost of publication as explained below.

Publication of the Dissertation.—Candidates for the Ph.D. and Ed.D. degrees may make one of three choices for publication of their dissertations which involves the disposition of the standard fifty dollar deposit.

1. The choice may be micro-film publication in which case the University will return thirty dollars of the deposit as soon as the dissertation has been accepted and the final examination passed.

2. The choice may be micro-card publication in which case the University will determine the cost of publication and will either return the un-needed part of the deposit or bill the student for the cost above fifty dollars as the case may be.

3. The choice may be to request a two year period to investigate possibilities for publication by printing. If publication is completed as a book or monograph in essentially complete form, the Graduate Council will consider a request for refund of the entire deposit upon receipt of five copies of the book or monograph. At the end of the two year period, unless evidence of acceptance of the dissertation for such publication has been presented, the Graduate Council will authorize publication of the dissertation by microfilm as indicated under (1) above.

Final Examination.—After the acceptance of the dissertation and the completion of all other prescribed work of the candidate, but in no case earlier than six months before the conferring of the degree, the candidate will be given a final examination, oral or written or both, by his supervisory committee. Satisfactory performance on this examination completes all requirements for the degree.

SPECIAL PROGRAMS

There are a number of special graduate programs that are described in detail in the University Catalog. Students interested in the following programs are referred to the catalog for complete information:

Cancer Research
School of Inter-American Studies.
Graduate Program in Public Administration
Research Program at The Oak Ridge Institute of Nuclear Studies
Statistical Laboratory
Graduate Program in Community Planning

SOUTHERN REGIONAL GRADUATE SUMMER SESSIONS IN STATISTICS

At the request of the Southern Regional Education Board's Advisory Commission on Statistics, Virginia Polytechnic Institute, the University of Florida, and the Consolidated University of North Carolina have agreed to initiate a continuing program of six-week graduate summer sessions in statistics to be held at each of the three institutions in rotation, beginning in the summer of 1954 at the Virginia Polytechnic Institute, Blacksburg, Virginia (June 9 to July 17), at Florida in 1955 and at Raleigh in 1956.

Each course offered will carry approximately three semester hours of graduate credit and each of the sponsoring institutions will accept credits earned in the summer sessions as residence credit. The courses are arranged to provide consecutive work in successive summers so that those who wish can complete the course work in statistics for a master's degree in three summers; students must satisfy the remaining requirements for course work and thesis at the institution where they have been admitted to candidacy. The advanced courses may be accepted as part of the Ph.D. program.

Full particulars concerning the content of the courses, teachers, fees and expenses may be obtained by writing Dr. Herbert A. Meyer, Director, Statistical Laboratory, Building O E.

FLORIDA POST GRADUATE CERTIFICATES

For regulations governing the securing of recommendations for the Florida Post Graduate Certificate and the Advanced Post Graduate Certificate, consult the Office of Graduate Studies in Education, 202 Yonge Building.

INSTRUCTIONS AND INFORMATION

1. The requirements for admission to the Graduate School are printed in the the *Admission* section of this catalog. Additional requirements may be imposed by individual colleges and divisions. (See General Index.)

2. Correspond with the Head of the Department of the college in which you propose to do your major work for specific information concerning course requirements, deficiencies to be completed, etc.

3. Eligibility for admission to graduate study can be determined only after you have filed all the credentials specified in the Admissions section of the catalog. The proper forms will be furnished by the Admissions Section of the Office of the Registrar and the prospective student will also be advised concerning other credentials he must submit in order to be considered for admission to graduate study.

4. The fees which graduate students must pay are listed in the section of this catalog dealing with expenses. (See General Index)

5. At the time designated by the Registrar, register with the dean of the college or division in which you propose to take your major work. Your registration form must be signed by the dean or someone designated by him. Either the head of the department or some other professor in this department will become the supervisor of your program, and he will suggest courses for which you should register.

6. *Passing grades for graduate students* beginning with the 1954 summer session in courses numbered below 600 are A and B. Passing grades for courses numbered 600 and above are A, B, and C; however, C grades in courses numbered 600 and above count toward a graduate degree only if an equal number of credit hours in courses numbered 600 and above are earned with grade of A.

7. No courses may be taken for graduate credit by correspondence. Up to six hours of approved credit may be transferred from accredited institutions to count on the requirements for masters' degrees. For the Master of Arts in Education and the Master of Education degrees, six hours of authorized extension graduate courses may be taken for both course and residence credit.

8. Observe the regulations and dates for satisfying the language requirements and for applying for admission to candidacy.

9. Normally students in the Graduate School must be registered in the University at the time they receive a degree. In the event that a student has completed at the time of registration for the term in which the degree is to be awarded all requirements for a degree including courses, residence, thesis or dissertation, and all examinations for the degree, the Graduate Council will entertain a petition to waive this requirement. In other words, the student must be registered for the term in which the final examination is given.

10. Early in your last term before graduation, notify the Registrar that you are a candidate for a degree. (See Calendar for *Last day for making application for a degree.*)

11. When you are ready to put the thesis in final form, get instructions at the office of the Dean of the Graduate School.

12. Caps, gowns and hoods are worn at commencement exercises. Graduating students must arrange for proper sizes of academic costumes through the University Bookstore.

13. Consult the professor of your major subject and your special supervisory committee for guidance. Consult the office of the Dean of the Graduate School if you wish interpretation of any requirement.

SPECIAL SIX WEEK COURSES IN STATISTICS

Enrollment is limited to persons whose applications have been approved by the Director of the University of Florida Statistical Laboratory. Persons interested in these courses should communicate with him in advance of the application dates listed in the calendar.

SOUTHERN REGIONAL COOPERATIVE GRADUATE SUMMER SESSION.

The University of Florida, North Carolina State College, Virginia Polytechnic Institute and the Southern Regional Education Board are jointly sponsoring a series of cooperative graduate summer sessions in statistics. The sessions will be of particular interest to (1) research and professional workers who want intensive instruction in basic statistical concepts and who wish to learn modern statistical methodology; (2) teachers of elementary statistical courses who want some formal training in modern statistics; (3) prospective candidates for graduate degrees in statistics; (4) graduate students in other fields who desire supporting work in statistics; and (5) professional statisticians who wish to keep informed of advanced specialized theory and methods. Students registering in this program may register for not more than six semester hours of credit. Each course is designated by the department number and title as used at the University of Florida followed by the title and description of the equivalent course as adopted for use by the cooperating institutions.

AGRONOMY

AY. 650.—Research Methods. 3 credits.

7:00-8:30 Daily MIL 25 MARSHALL, C. E.

STATISTICAL METHODS I. **Prerequisite: Interest in Research.**

Measures of location and variation; observed and theoretical frequency distributions; tests of significance; analysis of variance and covariance; linear and non-linear, simple and multiple regression; basic experimental designs; factorial experiments; and goodness of fit.

AY. 651.—Design of Experiments. 3 credits.

7:00-8:30 Daily MIL 26 HARSHBARGER, B.

STATISTICAL METHODS II. **Prerequisite: A course in basic statistics.**

Fundamental principle of designs, randomized blocks, Latin squares, split-plot and factorial designs; individual comparisons, components of error, confounding, application to problems in applied fields.

MATHEMATICS

MS. 551.—Advanced Topics in Calculus. 3 credits.

10:20-11:50 Daily MIL 27 SOUTH, D. E.

MATHEMATICS FOR STATISTICS. **Prerequisite: Calculus.**

Special topics of an advanced nature in mathematics basic to an understanding of mathematical statistics.

MS. 619.—Theory of Probability and Theory of Sampling. 3 credits.

8:40-10:10 Daily MIL 25 NICHOLSON, G. E., JR.

STATISTICAL THEORY I. **Prerequisite: Calculus.**

Elementary combinatorial probability theory; probability distributions; generating functions; limit theorems; small sample distributions Chi-square, t and F; elementary theory of tests of hypotheses and of estimation.

MS. 620.—Advanced Statistics. 3 credits.

8:40-10:10 Daily MIL 26 DUNCAN, D. B.

STATISTICAL THEORY II. **Prerequisite: Theory I.**

Point and interval estimation, parametric and non-parametric tests of hypotheses. Analytical theory of least squares: multiple regression and basic analysis of variance and analysis of covariance theory.

MS. 690.—Special Topics. 3 credits.

7:00-8:30 Daily MIL 27.

SECTION I: THEORY OF SAMPLING. **Prerequisite: Theory I, Methods I.**

Basic theory of sampling from a finite population. Confidence limits and estimation of optimum sample size. Comparison of simple random, stratified, quota, purposive, and systematic sample. Choice of sampling unit. Subsampling. Relative efficiencies of different methods of estimation. Double sampling. Discussion of unique applications of sampling theory.

MS. 690.—Special Topics. 3 credits.

10:20-11:50 Daily MIL 25 SMITH, W. L.

SECTION II: THEORY OF STATISTICAL INFERENCE. **Prerequisite: Theory II.**

Sufficient statistics. Unbiassed estimators with minimum variance. Maximum likelihood estimation. Consistent estimators. Admissable, Bayes and minimax estimators. Risk functions. Sequential tests and estimates. Double sampling.

MS. 690.—Special Topics. 3 credits.

8:40-10:10 Daily MIL 27 ANDERSON, R. L.

SECTION III: SPECIAL ADVANCED TOPICS IN STATISTICAL ANALYSIS. **Prerequisite: Theory II and a course in Design of Experiments.**

Regression analysis with errors in both variates; orthogonal polynomials, principles of construction experimental models; effects of inadequacies in the models; variance components; discriminate functions; uses of Chi-square; methods of combining data with heterogeneous errors; methods of transforming data to meet specific objectives.

EDUCATION

EDF. 660.—Educational Statistics. 3 credits.

10:20-11:50 Daily MIL 26 RULON, P. J.

STATISTICAL RESEARCH IN EDUCATION AND PSYCHOLOGY. **Prerequisite: Courses in statistics.**

Statistical problems arising in education and psychology. Designed especially to inform research workers and those interested in the teaching of statistics in psychology and education of some of the recent advances in the field.

SEMINAR.—Recent Advances in Statistics. No credit.

3:00-4:30 Tuesday and Thursday. LE 207 MEYER, H. A.

Distinguished speakers will give seminars on recent developments in statistical theory and methodology on two or three afternoons a week.

SPECIAL THREE WEEK COURSES

The courses listed in this section are for special groups and run for three weeks only. Enrollment is limited to these special groups as indicated. Students registering for courses listed in this section follow the same admission and registration procedures as other students but are limited to a maximum load of three semester hours.

June 21 to July 8

AGRICULTURAL ECONOMICS

ADVANCED UNDERGRADUATE AND GRADUATE COURSE

AS. 503.—Advanced Farm and Home Management. 1½ credits. Open to agricultural extension workers only.
10:30 Daily FLO 104 GREENMAN, J. R.
Laboratory 2:00 to 5:20 W F FLO 104

Principles of production and consumption economics as applied to farm and home development plans; general farm management principles; the actual preparation and analysis of farm and home development plans for each of four different farm situations. The farms will be visited, and the proposed plans will be discussed in class and with the farm families.

AGRICULTURAL ENGINEERING

AG. 460.—Supplemental Irrigation. 1½ credits. Open only to agricultural extension workers who have not received credit for AG. 301.
7:00 Daily FLO 210 CHOATE, R. E.
Laboratory: 2:00 to 4:10 Th FLO 210

The general principles of design of supplemental irrigation systems with treatments of water requirements, sources of water, pumps, power and economic evaluations.

GRADUATE COURSE

AG. 670.—Problems in Agricultural Engineering. 3 credits. Open to vocational agriculture teachers only.
To arrange. FLO 210 ROGERS, F.

Special problems in agricultural engineering.

AGRICULTURAL EXTENSION

GRADUATE COURSE

AXT. 607.—Principles in the Development of Youth Programs. 1½ credits. Open to agricultural extension workers only.
8:10 Daily K 111 HAMPSON, C. M.
Laboratory: 2:00 to 5:20 M.

Advanced training in conducting 4-H Club work.

EDUCATION—GENERAL

ED. 482.—Planning for Improved Daily Living (Formerly EN. 482). 3 credits.
Section 1. 8:10-12:40 Daily YON 323 INGLE, K.

A study of Florida resources is made applicable to richer living. Attention is given to developing appreciation and understanding of art principles applied to costume design, home decoration, and other phases of esthetic living.

GRADUATE COURSES

ED. 625.—Workshop for Rehabilitation Counseling. 3 credits.
Section 1. 8:10-11:30 Daily

This course will orient students in the theory and principles involved in counseling and will provide an opportunity for the development of skills and techniques necessary to become effective vocational rehabilitation counselors.

ED. 670.—Workshop in Human Relations. 3 credits.
8:10-11:30 Daily COMBS, A. W., and WILES, K.

Various problems in human relations and ways of working with them and seeking solutions, form the core of the workshop experiences. Open to teachers, principals, lay leaders, and others concerned with techniques and procedures, with group dynamics and group process.

EDUCATION—ELEMENTARY

EDE. 600.—Elementary School Curriculum (Formerly EN. 501). 3 credits.
Section 2. 8:10-11:30 Daily I 207 HILLIARD, P.

EDUCATION—FOUNDATIONS

EDF. 640.—Problems in Pupil Development and Learning (Formerly EN. 542). 3 credits.
Section 3. 8:10-11:30, 12:50-4:10 Daily YON 236 CUNNINGHAM, M. T., KNIGHT, J., and STAFF

EDUCATION-SECONDARY

EDS. 600.—Foundations of Secondary School Curriculum (Formerly EN. 519). 3 credits.
Section 3. 8:10-11:30 Daily I 103 OLSON, C. M.

EDUCATION—VOCATIONAL AGRICULTURE

EDV. 671.—Adult Education in Agriculture. (Formerly EN. 571). 3 credits.
8:10-11:30 Daily I 109 LOFTEN, W. T.

Problems of organizing and teaching adult farmer classes.

HORTICULTURE

HE. 361.—Landscape Plantings for Florida. 1½ credits. Open to county and home demonstration agents only.
9:20 Daily FLO 209 WATKINS, J. V.
Laboratory: 2:00 to 4:10 T.

Elements of landscape planting, identification, maintenance and landscape uses of plant materials commonly used in beautification of homes and schools in Florida.

SPECIAL THREE WEEK COURSES

The courses listed in this section are for special groups and run for three weeks only. Enrollment is limited to these special groups as indicated. Students registering for courses listed in this section follow the same admission and registration procedures as other students but are limited to a maximum load of three semester hours.

July 11 — July 29

EDUCATION—GENERAL

ED. 482.—Planning for Improved Daily Living (Formerly EN. 482). 3 credits.
Section 2. 8:10-12:40 Daily YON 323 INGLE, K.

A study of Florida resources is made applicable to richer living. Attention is given to developing appreciation and understanding of art principles applied to costume design, home decoration, and other phases of esthetic living.

GRADUATE COURSES

EDUCATION—GENERAL

ED. 631.—Educational Leadership I. (Formerly EN. 557). 3 credits.
Section 2. 8:10-11:30 Daily WILES, K.

EDUCATION—ELEMENTARY

EDE. 670.—Language Arts in the Elementary School—Skills (Formerly EN. 578). 3 credits.
8:10-11:30 Daily I 207 THOMPSON, E. M.

Trends and practices in the teaching of reading, and oral and written expression.

EDUCATION—FOUNDATIONS

EDF. 640.—Problems in Pupil Development and Learning (Formerly EN. 542). 3 credits.
Section 4. 8:10-11:30, 12:50-4:10 Daily YON 236 CUNNINGHAM, M. T., KNIGHT, J., and STAFF

EDF. 642.—Problems in Educational Psychology (Formerly EN. 541). 3 credits.
Section 2. 8:10-11:30 Daily YON 114 WATKINS, L. E.

EDUCATION—SECONDARY

EDS. 611.—The Core Program in the Secondary School (Formerly EN. 675). 3 credits.
8:10-11:30 Daily I 103 OLSON, C. M.

A study of the organization, the methods, and the materials used in core classes.

EDUCATION—VOCATIONAL AGRICULTURE

EDV. 667.—Supervised Farming Problems in Agricultural Education (Formerly EN. 567). 3 credits.
8:10-11:30 Daily I 109 LOFTEN, W. T.

Evaluation of practices being used in conducting supervised farming programs.

SPECIAL SIX WEEK WORKSHOP

JUNE 21 — JULY 30

Enrollment limited to 40 selected educators from the states of Alabama, Georgia, South Carolina, and Florida. Not open to general registration.

EDUCATION—SECONDARY

Family Financial Security Workshop

EDS. 600.—Foundations of the Secondary School Curriculum (Formerly EN 501). 3 credits.

Section 2. 12:50-3:00 Daily BRO MYERS, R. B., and RICHARDSON, J. G.

EDS. 641.—Economic Education in the Secondary School (Formerly EN. 580). 3 credits.

8:10-11:30 Daily BRO MYERS, R. B., and RICHARDSON, J. G.

Workshop sponsored by Committee on Family Financial Security Education, the College of Education, and the College of Business Administration.

SCHEDULE OF COURSES SUMMER SESSION 1955

JUNE 21 TO AUGUST 13

MINIMUM SIZE OF CLASSES

No undergraduate class or section will be continued or offered if, at the end of the regular registration period, prior to the day classes begin for a term or semester, the registration does not meet the following minimum requirements.

For Freshmen and Sophomore classes or sections (the comprehensive courses and courses numbered in the 100's and 200's) the minimum is 12 registrations.

For Junior classes or sections (courses numbered in the 300's) the minimum is 8 registrations.

For Senior classes or sections (courses numbered in the 400's and 500's) the minimum is 6 registrations.

ABBREVIATIONS

The following abbreviations have been used to designate buildings:

A	BUILDING A (Accounting)
ADM	ADMINISTRATION BUILDING
AE	BUILDING AE (Family Life)
AND	ANDERSON HALL
AUD	AUDITORIUM
B	BUILDING B
BNX	BENTON ANNEX
BEN	BENTON HALL
C	BUILDING C (Art)
CRL	CANCER RESEARCH LABORATORY
DAL	DAIRY LABORATORY
E	BUILDING E
ENG	ENGINEERING AND INDUSTRIES BUILDING
F	BUILDING F
FLG	FLORIDA GYMNASIUM
FLI	FLINT HALL
FLO	FLOYD HALL
FML	FARM MACHINE LABORATORY
HGH	GREENHOUSE
I	BUILDING I (Classrooms)
K	BUILDING K (Classrooms)
L	BUILDING L
LEI	LEIGH HALL
LIB	LIBRARY
LAW	LAW BUILDING
MAT	MATHERLY HALL
MIL	MILITARY BUILDING
N	BUILDING N (Engineering Classrooms and Laboratories)
NEW	NEWELL HALL
NUL	NUTRITION LABORATORY
OD	OFFICE D
OE	OFFICE E
OF	OFFICE F
PEA	PEABODY HALL
POL	POULTRY LABORATORY
R	BUILDING R (Music)
REE	REED LABORATORY
ROL	ROLFE HALL
SAL	SANITARY LABORATORY
U	BUILDING U (Architecture and Art)
UAN	UNION ANNEX
VEL	VEGETABLE PROCESSING LABORATORY
WAL	WALKER HALL
WGY	WOMEN'S GYM
YON	YONGE BUILDING

Classes listed as meeting daily will meet Monday through Friday.
Classes will begin at the time shown and last 60 minutes.

COMPREHENSIVE COURSES

C-1

C-11.—American Institutions. 4 credits.

(Student registers for one lecture (2 digit section number) and one discussion (3 digit section number).

Lecture Section 11: 10:30 M W WAL AUD

Discussion Sections:

Section 101	7:00	Daily	PEA 206
Section 102	7:00	Daily	PEA 208
Section 103	8:10	Daily	PEA 206
Section 104	8:10	Daily	PEA 208
Section 105	9:20	Daily	PEA 206
Section 106	9:20	Daily	PEA 208

C-12.—American Institutions. 4 credits.

(Register for one lecture (2 digit section number) and one discussion (3 digit section number).

Lecture Section 21: 10:30 T Th WAL AUD

Discussion Sections:

Section 201	7:00	Daily	PEA 102
Section 202	8:10	Daily	PEA 102
Section 203	9:20	Daily	PEA 102

C-11-12: Designed to develop and stimulate the ability to interpret the interrelated problems of the modern social world. The unequal rates of change in economic life, in government, in education, in science, and in religion are analyzed and interpreted to show the need for a more effective coordination of the factors of our evolving social organization of today. Careful scrutiny is made of the changing functions of social organizations as joint interdependent activities so that a consciousness of the significant relationships between the individual and social institutions may be developed, from which consciousness a greater degree of social adjustment may be achieved.

C-2

C-21.—The Physical Sciences. 3 credits.

(Register for one Lecture Section and one Discussion Section.)

Lecture Section 11: 2:00 M BEN 203

Lecture Section 12: 2:00 T BEN 203

Discussion Sections:

Section 101	7:00	Daily	BEN 201
Section 102	8:10	Daily	BEN 201
Section 103	9:20	Daily	BEN 201
Section 104	10:30	Daily	BEN 201

C-22.—The Physical Sciences. 3 credits.

(Register for one section.)

Section 201	8:10	Daily	BEN 205
Section 202	10:30	Daily	BEN 205
Section 203	8:10	Daily	BEN 203
Section 204	9:20	Daily	BEN 205

C-21-22: The primary aim of the course is to give the student a working knowledge, through the solution of numerous problems, of the physical factors in the environment which affect the development of civilization, with its various cultures. These factors are primarily space relations, weather and climate, landforms, and material and energy resources. The concepts are taken from the fields of astronomy, physical geography, meteorology and climatology, geology, chemistry, and physics.

C-3

C-31.—Reading, Speaking, and Writing (Freshman English). 4 credits.

(Register for the Lecture Section, one Discussion Section, and one Laboratory Section)

Lecture Section 11: 8:10 W WAL AUD

Discussion Sections:

Section 101	7:00 M T Th F	MAT 3
Section 102	8:10 M T Th F	MAT 3
Section 103	9:20 M T Th F	MAT 3
Section 104	10:30 M T Th F	MAT 3
Section 105	11:40 M T Th F	MAT 3
Section 106	12:50 M T Th F	MAT 3

Writing Laboratory Sections:

Section 301	8:10-10:20 M Th	AND 203
Section 302	10:30-12:40 M Th	AND 203
Section 303	12:50-3:00 M Th	AND 203

C-32.—Reading, Speaking, and Writing (Freshman English). 4 credits.

(Register for the Lecture Section, one Discussion Section, and one Laboratory Section)

Lecture Section 21: 9:20 W WAL AUD

Discussion Sections:

Section 201	8:10 M T Th F	AND 20
Section 202	9:20 M T Th F	AND 20
Section 203	10:30 M T Th F	AND 20
Section 204	11:40 M T Th F	AND 20

Writing Laboratory Sections:

Section 401	8:10-10:20 T F	AND 203
Section 402	10:30-12:40 T F	AND 203

C-31-32: Reading, Speaking and Writing. Designed to furnish the training in reading, speaking, and writing necessary for the student's work in college and for his life thereafter. This training will be provided through practice and counsel in oral reading, in silent reading, in logical thinking, in fundamentals of form and style, in extension of vocabulary and in control of the body and voice in speaking. Students will be encouraged to read widely as a means of broadening their interests and increasing their appreciation of literature.

C-41

C-41.—Practical Logic. 3 credits.

(Register for one section only.)

Section 1	8:10 Daily	ADM 208
Section 2	9:20 Daily	ADM 208
Section 3	10:30 Daily	ADM 208
Section 4	11:40 Daily	ADM 208

Both in private life and in vocational life man is faced with the necessity of thinking. In this course an attempt is made to stimulate the student (1) to develop his ability to think with greater accuracy and thoroughness, (2) to be able to use objective standards necessary in critically evaluating his own thinking process and product as well as the conclusions reached by others, and (3) to record both process and product of thinking in effective language. The material used applies to actual living and working conditions. The case method is to insure practice, many illustrations are given, and numerous exercises are assigned.

C-42

C-42.—Fundamental Mathematics. 3 credits.

(Register for one section only.)

Section 1	8:10 Daily	PEA 7

Section 2 9:20 Daily PEA 7
Section 3 10:30 Daily PEA 7
Section 4 12:50 Daily PEA 7

A practical elementary course consisting of the subject matter considered most useful for students who do not plan necessarily to specialize in mathematics. It covers the development of the number system, computation with approximate and exact numbers, algebra as a generalization of arithmetic, practical geometry, functional relationships, logarithms, the simple trigonometry of the triangle, simple and compound interest, and annuities. Not open to students who have completed Basic Mathematics.

C-5

C-51.—The Humanities. 4 credits.

(Register for the Lecture Section, and one Discussion Section.)
Lecture Section 11: 11:40 M W WAL AUD
Discussion Sections:
Section 101 7:00 Daily AND 115
Section 102 8:10 Daily AND 115
Section 103 9:20 Daily AND 115
Section 104 10:30 Daily AND 115
Section 105 12:50 Daily AND 115
Section 106 7:00 Daily AND 113
Section 107 8:10 Daily AND 113
Section 108 9:20 Daily AND 113
Section 109 10:30 Daily AND 113
Section 110 12:50 Daily AND 113

C-52.—The Humanities. 4 credits.

(Register for the Lecture Section and one Discussion Section.)
Lecture Section 21: 11:40 T Th WAL AUD
Discussion Sections:
Section 201 7:00 Daily AND 112
Section 202 8:10 Daily AND 112
Section 203 9:20 Daily AND 112
Section 204 10:30 Daily AND 112
Section 205 12:50 Daily AND 112
Section 206 8:10 Daily AND 110
Section 207 9:20 Daily AND 110

C-5.—The Humanities.

A course designed to acquaint the student with the great literature, philosophy, art and music in Western Civilization. Both our cultural heritage and the culture of our own day are studied. Major emphasis is placed upon mature understanding, enlarged appreciation, and a philosophy of life adequate for the needs of our age.

C-6

C-61.—Biological Sciences. 3 credits.

(Register for one Lecture Section and one Discussion Section.)
Lecture Section 11: 2:00 M FLI 101
Lecture Section 12: 3:10 T FLI 101
Discussion Sections:
Section 101 7:00 Daily FLI 112
Section 102 8:10 Daily FLI 112
Section 103 9:20 Daily FLI 112
Section 104 10:30 Daily FLI 112

Section 105 11:40 Daily FLI 112
Section 106 8:10 Daily FLI 110
Section 107 9:20 Daily FLI 110

C-62.—Biological Sciences. 3 credits.
(Register for one Lecture Section and one Discussion Section.)

Lecture Section 21: 3:10 M FLI 101
Lecture Section 22: 2:00 T FLI 101

Discussion Sections:
Section 201 7:00 Daily FLI 104
Section 202 8:10 Daily FLI 104
Section 203 9:20 Daily FLI 104
Section 204 10:30 Daily FLI 104
Section 205 10:30 Daily FLI 110

C-61-62: The biological problems and principles associated with the organism's role as: a living individual, a member of a race, a product of evolutionary processes, and a member of a socially and economically interrelated complex of living organisms. Under these headings such topics as the structure and functioning of the human body, the structure and functioning of the higher plants, methods of reproduction, heredity and variation, the theory of evolution, and ecology will be studied. The lectures will be devoted to a consideration of biological topics and contributions of current, social, political and historical interest.

ACCOUNTING

ATG. 211.—Elementary Accounting. 3 credits. The first half of the course ATG. 211-212.
(Register for one section only.)
Section 1. 8:10 Daily MAT 225
Section 2. 10:30 Daily MAT 224

The basic training in business practice and in accounting. A study of business papers and records; recording transactions; preparation of financial statements and reports.

ATG. 212.—Elementary Accounting. 3 credits. The second half of the course ATG. 211-212.
(Register for one section only.)
Section 1. 7:00 Daily MAT 224 RAY, D. D.
Section 2. 8:10 Daily MAT 16 PETERSON, E. G.
Section 3. 9:20 Daily MAT 14 MOORE, J. F.

ATG. 311.—Accounting Principles. 3 credits. Prerequisite: ATG. 212.
8:10 Daily MAT 224 RAY, D. D.

The mechanical and statistical aspects of accounting; books of record; accounts; fiscal period and adjustments; working papers; form and preparation of financial statements; followed by an intensive and critical study of the problems of valuation as they affect the preparation of the balance sheet and income statements.

ATG. 312.—Accounting Principles. 3 credits. Prerequisite ATG. 311.
9:20 Daily MAT 16 PETERSON, E. G.

The legal aspects of accounting and related problems resulting from the legal organization form used by business; liabilities; proprietorship; corporations; capital stock; surplus; followed by a study of the financial aspects of accounting as disclosed by an analysis and interpretation of financial statements; financial ratios and standards, their preparation, meaning and use.

ATG. 313.—Cost Accounting. 3 credits. Prerequisite ATG. 212.
11:40 Daily MAT 14 MOORE, J. F.

The methods of collection, classification, and interpretation of cost data; special problems, standard costs, cost systems, use of cost data in business control.

ATG. 411.—Advanced Accounting. Problems. 3 credits. Prerequisite: ATG. 312.
11:40 Daily MAT 225 MOSHIER, W. F.

Specialized accounting problems; partnerships; statement of affairs; consignments; installments; ventures; insurance and other related subjects.

ATG. 412.—Principles of Auditing. 3 credits. Prerequisite ATG. 312.
10:30 Daily MAT 225

Auditing theory and current auditing practice; principal kinds of audits and services of the public accountant; professional and ethical aspects of auditing.

ATG. 414.—Income Tax Accounting. 3 credits. Prerequisite ATG. 311.
9:20 Daily MAT 225 DEINZER, H. T.

A study of the federal income tax law and related accounting problems. Determination of gross income and of deductions is studied for taxpayers generally. The course emphasizes this process for individuals. Practice is provided in the preparation of returns for individuals, and in the use of the loose-leaf income tax service.

ATG. 415.—Corporate Accounting Problems. 3 credits. Prerequisite ATG. 411.
8:10 Daily MAT 119 MOSHIER, W. F.

The corporate accounting problems concerning consolidation, reorganization, quasi-reorganization, mergers and voluntary and involuntary liquidations.

ATG. 417.—Governmental Accounting. 3 credits. Prerequisite or corequisite: ATG. 311.
7:00 Daily MAT 119

The basic principles underlying governmental and institutional accounting. Detailed consideration is given to the operation of recommended types of funds, the budget process, account structure, tax accounting for cities, and the utilization of accounting in the preparation of significant reports.

GRADUATE COURSES

ATG. 611.—Accounting Theory. 3 credits. Prerequisite: ATG. 411.
9:20 Daily MAT 224 LANHAM, J. S.

The theory behind accounting functions in their relation to the business enterprise.

ATG. 614.—Federal Income Tax Accounting. 3 credits. Prerequisite ATG. 414.
11:40 Daily MAT 119 DEINZER, H. T.

Advanced consideration of corporation income tax accounting; procedure in respect to the controversies over income tax liability, including rules of practice before the Treasury Department and the Tax Court; and federal estate and gift taxes, including their income tax aspects. This course requires some original search for the application of income tax standards, and provides for the preparation of reports and briefs.

ATG. 699.—Research and Thesis. 0 to 6 credits*

Directed research and writing for the Master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours course work required for the master's degree.

ATG. 718.—Evolution of Accounting Theory and Practice. 3 credits. Prerequisite: ATG. 411.
10:30 Daily MAT 208 LANHAM, J. S.

Development of accounting principles and practices and their relation to economics, law and finance.

ATG. 799.—Research and Dissertation. 1 to 6 credits*

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.

AGRICULTURAL CHEMISTRY

GRADUATE COURSE

ACY. 699.—Research and Thesis. 0 to 6 credits.*

*Credit assigned must be shown on course assignment card.

AGRICULTURAL ECONOMICS

AS. 201.—Principles of Agricultural Economics. 3 credits.
9:20 Daily FLO 104 GREENMAN, J. R.

An introduction to the field of agricultural economics; principles of economics as applied to agriculture; economic problems of the agricultural industry and the individual farmer.

AS. 304.—Farm Finance and Appraisal. 3 credits.
8:10 Daily FLO 104 BROOKER, M. A.

Volume, sources and uses of agricultural credit in Florida and the United States. The principles of credit and problems peculiar to financing farmers and farmers' associations. One field trip usually required.

AS. 306.—Farm Management. 3 credits.
10:30 Daily FLO 108 BROOKER, M. A.

Introduction to the principles of farm management. Types of farming in Florida and the United States, and factors which determine types of farming. The causes of success and failure of farms and farmers. Problems of labor, machinery, layout of farms, farm reorganization, and such.

AS. 308.—Marketing. 3 credits.
9:20 Daily OD McPHERSON, W. K.

Basic principles of marketing with emphasis placed on market functions, services, and organizations; elementary theory of demand and prices; commodity exchanges and futures trading; transportation; grades and standards; market news; methods of increasing efficiency of markets; the role of co-ops and government in marketing. One field trip required.

AS. 413.—Agricultural Policy. 3 credits.
11:40 Daily FLO 102 GREENMAN, J. R.

A history of farmer attempts and accomplishments through organization and legislation to improve the economic and social status of agriculture. The basic problems and concepts involved in developing and carrying out an agricultural policy. Evaluation of present legislative programs and policies affecting the farmer.

GRADUATE COURSES

AS. 605.—Research Problems in Farm Management. 3 credits.
To arrange BROOKER, M. A.

Designed to train students in collecting, analyzing and presenting data on problems in the field of farm management. Special problems of interest to the individual student and agreeable with the instructor are selected for study. A statement of the problem is prepared, research work studied, publications reviewed and written reports developed.

AS. 611.—Research Problems in Marketing Agricultural Products. 3 credits.
To arrange McPHERSON, W. K.

Individual examinations of segments of the marketing system for Florida products. Emphasis may be placed on efficiency, market organization, trading arrangements, historical development or other aspects of the problem of interest to the student and agreeable with the instructor. A comprehensive report on the investigations and conclusions of the student is required.

AS. 699.—Research and Thesis. 0 to 6 credits.*
To arrange HAMILTON, H. G.

AS. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange HAMILTON, H. G.

AGRICULTURAL ENGINEERING

AG. 306.—Farm Machinery. 3 credits.
9:20 M T W Th FLO 210 RICHARDSON, J. B.
Laboratory: 2:00 to 4:10 W FML

The care, design, operation and repair of farm machinery.

*Credit assigned must be shown on course assignment card.

AG. 401.—Farm Structures. 3 credits.
11:40 M T W Th FLO 210 RICHARDSON, J. B.
Laboratory: 2:00 to 4:10 T FLO 210

The functional requirements, design and construction of farm buildings.

GRADUATE COURSES

AG. 671.—Research Problems in Irrigation. 3 credits.
To arrange. CHOATE, R. E.

AG. 699.—Research and Thesis. 0 to 6 credits.*
To arrange. ROGERS, F.

AGRICULTURAL EXTENSION

GRADUATE COURSE

AXT. 621.—Special Problems in Agricultural Extension Methods. Variable credit.*
To arrange HAMPSON, C. M.

Library and workshop relating to agricultural extension methods. Research work is studied, publications reviewed, written reports developed.

AGRONOMY

AY. 221.—General Field Crops. 3 credits.
8:10 M T W Th FLO 302 RODGERS, E. G.
Laboratory: 12:50 to 3:00 Th AL 1 RODGERS, E. G.

Grain, fiber, sugar, peanut, tobacco, forage and miscellaneous field crops, with special emphasis on varieties and practices recommended for southern United States. History, botanical characteristics, soil and climatic adaptations, fertilization, cultural practices, growing processes, harvesting, uses, and rotation systems are discussed.

AY. 329.—Genetics. 3 credits.
11:40 Daily FLO 302 EDWARDSON, J. R.

The fundamentals of inheritance, emphasizing the application of genetics and its associated branches of science in the improvement of economic plants and animals and in programs for human betterment.

AY. 426.—Individual Problems in Agronomy. Variable credit.*
To arrange. FLO 302 RODGERS, E. G. and SENN, P. H.

Individual problems selected from the fields of crop production or weed control.

GRADUATE COURSES

AY. 626.—Agronomic Problems. 3 credits.
To arrange FLO 302 RODGERS, E. G. and SENN, P. H.

Library, laboratory, or field studies which relate to crop production and improvement. Experiments are studied, publications reviewed and written reports developed.

AY. 627.—Problems in Genetics and Cytogenetics. 2 credits.
To arrange FLO 302 EDWARDSON, J. R.

Modern methods applied to specific genetic or cytogenetic research problems.

AY. 628.—Problems in Experimental Designs. Variable credit.*
To arrange FLO 302 DUNCAN, D. B.

Design, analysis, and interpretation of particular types of scientific experiments.

AY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange FL 302

AY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange FL 302

*Credit assigned must be shown on course assignment card.

ANIMAL HUSBANDRY AND NUTRITION

AL. 309.—General Animal Husbandry. 3 credits.
7:00 Daily FLO 104 LOGGINS, P. E.

Types and breeds of farm animals; market classification; selection and management.

GRADUATE COURSES

AL. 601.—Special Topics in Animal Science. 3 credits.
To arrange

Reviews and discussions of scientific literature in the field of animal science.

AL. 609.—Problems in Animal Husbandry and Nutrition. Variable credit.
To arrange DAVIS, G. K. and WALLACE, H. D.

AL. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

AL. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

ANTHROPOLOGY

APY. 500.—Field Session in Archeology. 6 credits. Prerequisite: 6 hours of anthropology, including APY. 201.
To arrange GOGGIN, J. M.

Excavation of archeological sites, recording of data, laboratory handling and analysis of specimens, and study of the theoretical culture principles which underlie field methods and artifact analysis.

APY. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of anthropolgy, including APY. 201.
To arrange GOGGIN, J. M.

ARCHITECTURE

AE. 101.—The Arts of Design. 3 credits.
10:30 Daily U 108

A survey of the visual arts: Landscape Architecture, Community Planning, Architecture, Building Construction, Interior Design, Sculpture, Crafts, Industrial Design, Commercial Art and Painting. A study of the basic nature of each art, its social significance and its relationship to other areas of the visual arts to provide a broad understanding of the visual arts and to form a basis for the selection of a career in the arts of design.

AE. 102.—Vision and Graphics. 3 credits.
7:00 to 10:20 Daily U 107

Functions and limitations of vision. Perception as the medium of our experiences in the visual arts. Space and light in visual design. Visual and graphic exercises for development of observation, graphic techniques, imaginative ability, visual design and aesthetic judgment. Study of the elements of design and principles involved in their use.

AE. 203.—Basic Design. 3 credits.
7:00 to 10:20 Daily U 107

Projects in Research and Design: The study of the basic influences of climate, natural environment, technology and culture on the design and construction of shelter. Introduction to the organization of space for human activity. Tools, materials and techniques of graphic representation.

AE. 204.—Organic Planning. 3 credits.
7:00 to 10:20 Daily U 107

Projects in Research and Design: Analysis and synthesis—the methodology of planning; the study and application of planning techniques utilized in the organization of space for human activity.

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*Credit assigned must be shown on course assignment card.

AE. 205.—Building Technology. 4 credits.
11:40 to 1:50 Daily U 103, U 109

The analysis of natural and manufactured building materials; their origin, physical, structural and aesthetic properties, methods of assembly and their proper use in building. The study of elementary framing systems; their methods of construction and architectural expression. An introduction to hydraulic, mechanical and electrical installations for buildings, and professional responsibilities in the building field.

AE. 206.—Building Technology. 4 credits.
11:40 to 1:50 Daily U 108, U 109

The study of types of loads exerted on buildings, their transmission through the building frame and the forces and stresses produced in the structural framing members. The characteristics of basic types of structural building frames and their integration in design.

UPPER DIVISION COURSES*

AE. 301-302-303-304-305.—Projects in Architecture, Group 1. 3 credits each;—group total, 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: Completion of Lower Division program in Architecture or equivalent.
To arrange E 175

AE. 306-307-308-309-310.—Projects in Architecture, Group 2. 3 credits each;—group total, 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series AE. 301-302-303-304-305.
To arrange E 179

AE. 401-402-403-404-405.—Projects in Architecture, Group 3. 3 credits each;—group total, 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series AE. 306-307-308-309-310.
To arrange E 126

AE. 406-407-408-409-410.—Projects in Architecture, Group 4. 3 credits each;—group total, 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series AE. 401-402-403-404-405.
To arrange E 116

AE. 501-502-503-504-505.—Projects in Architecture, Group 5. 3 credits each;—group total, 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series AE. 406-407-408-409-410.
To arrange E 157

AE. 506-507-508-509-510.—Thesis in Architecture. 3 credits each;—group total, 15 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series AE. 501-502-503-504-505.
To arrange E 189.

GRADUATE COURSES

AE. 601.—Architectural Design. 3 or 6 credits. Prerequisite: Bachelor's degree in Architecture.
To arrange E 127

Research on a special phase of architectural design, selected by the student with the approval of the Faculty.

AE. 602.—Architectural Design. 3 or 6 credits. The second half of the course AE. 601-602.
To arrange E 127

*For detailed course description refer to the University Catalog.

AE. 603.—Architectural Research. 3 or 6 credits. Prerequisite: Bachelor's degree in Architecture.

To arrange E 127

Detailed investigation of a selected problem for the purpose of providing insight and understanding in some field of fundamental importance in architecture.

AE. 604.—Architectural Research. 3 or 6 credits. The second half of the course AE. 603-604.

To arrange E 127

AE. 605.—Structural Design of Buildings. 3 or 6 credits. Prerequisite: Bachelor's degree in Architecture or in Building Construction.

To arrange E 127

Advanced study of a problem in the structural design of buildings, selected by the student with the approval of the Faculty.

AE. 606.—Structural Design of Buildings. 3 or 6 credits. The second half of the course AE. 605-606.

To arrange E 127

AE. 699.—Research and Thesis. 0 to 6 credits.*

For students working for the master's degree. Credits cannot be used to reduce the total course work required for the degree.

ART

ART 122.—Materials and Spatial Design. 3 credits.

10:30-12:40 Daily C 105 EBERSOLE, R. P.

Organization of three-dimensional forms with various materials.

ART 224.—Drawing and Visual Perception. 3 credits.

8:10-10:20 Daily C 101 MC INTOSH, P. R.

Creative drawing will include the drawing of still life and figure objects observed from the standpoint of form and content.

ART 226.—Pictorial Composition. 3 credits.

10:30-12:40 Daily C 100 MC INTOSH, P. R.

Pictorial composition using the oil medium, employing elements studied in ART 122 and ART 223.

ART 290.—Art Survey. 3 credits.

10:30 Daily X 4 GRISSOM, E. E.

An introduction to important examples of painting, sculpture, architecture and related arts from 4000 B.C. to contemporary art movements.

UPPER DIVISION COURSES**

ART 301.—Design I. 3 credits.

10:30-12:40 Daily C 100 MC INTOSH, P. R.

Watercolor techniques in a study of color, line, and design.

ART 302.—Design II. 3 credits.

10:30-12:40 Daily C 100 MC INTOSH, P. R.

Techniques and media. Organization in oil paint, encaustic, and egg tempera.

ART 311.—Freehand Drawing. 3 credits.

8:10-10:20 Daily C 101 MC INTOSH, P. R.

Studies will be made from the model relating the structure of the human figure to its movement.

ART 312.—Freehand Drawing. 3 credits.

8:10-10:20 Daily C 101 MC INTOSH, P. R.

A continuation of ART 311 with emphasis on the structure of the head and figure.

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*Credit assigned must be shown on course assignment card.
**For detailed course description refer to the University Catalog.

ART 330.—Patternmaking. 3 credits.
10:30-12:40 Daily X 15 BORGIA, A. P.
Fundamental principles of flat pattern designing by use of basic foundation patterns in various scale measurements.

ART 338.—Draping. 3 credits.
8:10-10:20 Daily X 15 BORGIA, A. P.
Introduction of principles of designing patterns by use of dress form.

ART 341.—Elementary Photography. 3 credits. Prerequisite: C-21 and C-22.
8:10-10:20 Daily X 12 EBERSOLE, R. P.
A course in photographic technique and design for those who have had no previous experience with photography.

ART 351.—Landscape and Figure Painting I. 3 credits.
2:00-4:10 Daily C 101
Pictorial organization in terms of nature.

ART 352.—Landscape and Figure Painting II. 3 credits.
2:00-4:10 Daily C 101
Advanced work in the pictorial interpretation of nature.

ART 360.—Layout. 3 credits.
2:00-4:10 Daily C 105 SUMMERS, M. D.
The elements of design in layout.

ART 361.—Lettering and Instrumental Drawing. 3 credits.
2:00-4:10 Daily C 105 SUMMERS, M. D.
The design of letters suitable to the subject. Instruction in the mechanical aids to drawing.

ART 362.—Advertising Design. 3 credits.
2:00-4:10 Daily C 105 SUMMERS, M. D.
The various media and techniques used in commercial art. Problems include illustrations and spot designs.

ART 383.—Jewelry and Metalwork. 3 credits.
2:00-4:10 Daily X 14
A creative and technical approach to the design problems in jewelry and metal forming.

ART 413.—Freehand Drawing III. 3 credits.
8:10-10:20 Daily C 101 MC INTOSH, P. R.
Interpreting gestures, weights, and contours of the human head and figure.

ART 453.—Figure and Portrait Painting. 6 credits.
2:00-4:10 Daily C 101
12 hours to arrange.
Work from the model with stress on pictorial organization .

ART 454.—Special Problems in Painting. 6 credits.
2:00-4:10 Daily C 101
12 hours to arrange.
The course is planned to permit the student to follow such problems as are worked out between himself and his instructor with the purpose of developing a more personal direction in the student's work.

ART 464-465-466.—Projects in Advertising Design. Group 2. Each course six hours of lecture-laboratory for 3 credits;—group total, 9 credits.
Hours to arrange C 105 SUMMERS, M. D.
Problems involving more complex design elements. ART 465 and ART 466 will allow students to explore specialized fields.

ART 494.—Modern Art. 3 credits.
8:10 Daily X 4 GRISSOM, E. E.
The history of art from 1850 and the development of art leading to movements such as fauvism, cubism, futurism, expressionism, etc. Emphasis devoted to French and American Art.

GRADUATE COURSES

ART 651-652-653-654.—Art Problems in Painting and Drawing. 3 credits.
Hours to arrange X 1

Under the guidance of the instructor, the student will plan and execute a series of projects related to the field of painting.

ART 655-656-657-658.—Art Research in Painting and Drawing. 3 credits.
Hours to arrange X 1

An opportunity for advanced students in painting to investigate technical processes that can be adapted to problems of a varied nature.

ART 681-682-683-684.—Art Problems in Crafts. 3 credits each.
Hours to arrange X 14

Under the guidance of the instructor, the student will plan and execute a series of projects related to the field of crafts.

ART 685-686-687-688.—Art Research in Crafts. 3 credits each.
Hours to arrange X 14

Research in native materials or technical processes that can be adapted to problems in the field of crafts.

ART 691.—Art of the Twentieth Century. 3 credits.
Hours to arrange X 4

Individual work with occasional conferences. An analysis of the various art movements beginning with Cezanne, and their relationship to contemporary art expression.

ART 699.—Research and Thesis. 0 to 6 credits.*
For students working for the Master's Degree.

ASTRONOMY

ATY. 141.—Descriptive Astronomy. 3 credits. Not open to students who have had any other course in astronomy.
8:10 Daily WAL 202

An elementary survey of the astronomical universe with a minimum of mathematical work. Primarily intended as an elective for those not majoring in a physical science or mathematics. Occasional observing periods with the telescope and demonstrations with the Spitz Planetarium.

BACTERIOLOGY

BCY. 300.—Bacteria in Everyday Life. 3 credits. Prerequisite: C-61 or equivalent.
(Register for the Lecture Section and one Laboratory Section)
Lecture Section 1: 8:10 M T W Th ENG 420 CARROLL, W. R., PRATT, D. B., and TYLER, M. E.
Laboratory Section 11: 9:20 to 11:30 T Th L 3 CARROLL, W. R., PRATT, D. B., and TYLER, M. E.
Section 12: 12:50 to 3:00 T Th L 3 CARROLL, W. R., PRATT, D. B., and TYLER, M. E.

Bacteria in relation to evolution, higher plants and animals, and particularly man. Their functions in the cycle of chemical transformations, in food production, in disease, and in general sanitation. The related activities of some yeasts and molds, and of the filterable disease agents. A terminal course, not acceptable for admission to advanced courses in bacteriology. Available for minor credit to graduate students in non-science curricula only.

BCY. 406.—Sanitary Microbiology. 4 credits. Prerequisite: 4 hours of introductory Bacteriology.
9:20 M T W Th FLI 101 CARROLL, W. R.
Laboratory 12:50 to 3:00 M W F BEN 108 CARROLL, W. R.

Discussion of bacteriological problems in sanitation of water supplies, sewage, swimming pools, restaurants, and air, with emphasis on water and sewage. Laboratory exercises in detection and identification of typical bacterial contaminants, including Standard Methods.

*Credit assigned must be shown on course assignment card.

BCY. 600.—Public Health Microbiology. Variable credit.*
To arrange Jacksonville.** BUREAU OF LABORATORIES STAFF
Principles and methods in diagnostic public health microbiology.

BCY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange STAFF

BIOLOGY

BLY. 133.—Common Animals and Plants of Florida. 3 credits. Prerequisite: C-6.
(Register for the Lecture Section and one Laboratory Section)
Lecture Section 1: 12:50 M W FLI 102 WESTFALL, M. J.
Laboratory Sections:
11: 2:00 to 5:20 M W FLI 14
12: 12:50 to 4:10 T Th FLI 14
Designed to provide a recognition of, and an acquaintance with, some of the more common animals and plants of Florida. Especially planned to prepare teachers to answer the question, "What animal—or what plant—is that?" Individual work in the field and the making of a personal reference collection of plants and animals is encouraged.

BLY. 161.—Biology Laboratory. 2 credits. Prerequisite or corequisite: C-61.
9:20 to 11:30 M T W Th J 101 KILBY, J. D.
An introductory laboratory course dealing with cells, the mammalian anatomy, the major groups of plants, methods of reproduction and germ cell formation.

BLY. 162.—Biology Laboratory. 2 credits. Prerequisite or corequisite: C-62.
7:00 to 9:10 M T W Th J 202 HUSSEY, R. F.
An introductory laboratory course dealing with genetics, homology, embryology, evolution, taxonomy, and ecology.
(Bly. 161 and 162 are prerequisites for most of the other courses in this department).

BLY. 208.—Invertebrate Zoology. 4 credits. Prerequisites: BLY 161-162.
10:30 M T Th F FLI 102 PIERCE, E. L.
Laboratory: 12:50 to 4:10 M T Th F FLI 2
Structure, function, and evolutionary relationship of a selected series of animals without backbones.

BLY. 301.—Biological Laboratory Technique for Teachers. 3 credits. Prerequisite: BLY. 161-162.
11:40 T Th FLI 109A GRIFFITH, M.
Laboratory: 12:50 to 4:10 T Th FLI 4
Designed to provide prospective instructors at the high school level with a sounder background in biology and information regarding methods of preparation of material and sources of supply for the high school course.

BLY. 302.—The Life of the Inland Waters of Florida. 3 credits. Prerequisite: BLY. 133.
11:40 M FLI 102 GOIN, C. J.
Laboratory: 2:00 to 5:20 M W FLI 4
A companion course to BLY. 133 but concerned with the common plants and animal life of our streams, pools, ponds, lakes and marshes. Particular attention is given to obtaining an acquaintance with those species and groups of organisms that comprise the more important, more conspicuous, and more interesting members of Florida's rich aquatic biota. Laboratory demonstrations, field trips and individual projects will form an important part of this course.

BLY 430.—Individual Studies in Animal Biology. 3 credits. Prerequisites: At least fourteen hours in approved major courses in biology, and consent of instructor. May be repeated for full credit.
To arrange STAFF
Qualified students and the instructor concerned may choose a particular topic or problem for study.

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*Credit assigned must be shown on course assignment card.
**Course given at Bureau of Laboratories, State Board of Health, Jacksonville.

GRADUATE COURSES

BLY. 605.—History of Biology. 2 credits. Required of all graduate majors.
9:20 M T W Th FLI 109A JONES, E. R.

A study of the development of biology as a science from the earliest recorded observations of animal and plant life up to and including the first decades of the twentieth century. The History of Biology is considered as an integral part of the history of science and of human culture in general; interrelationships are stressed. The course concludes with a brief survey of the development of biology in the United States.

BLY. 630.—Individual Studies in Animal Biology. Hours and credit to be arranged. Prerequisite: Graduate status and consent of the instructor.
To arrange STAFF

Studies may be chosen from one or more aspects of the following fields: Comparative anatomy, cytology, ecology, embryology, experimental biology, fresh water biology, game management, genetics, herpetology, histology, ichthyology, invertebrate zoology including arachnology and insect biology, limnology, malacology, mammalogy, marine biology, ornithology, parasitology, general or comparative physiology, protozoology, vertebrate paleozoology, and zoogeography. Bly. 630 may be elected for additional credit in subsequent semesters.

BLY. 633.—Problems and Concepts of Taxonomy and Nomenclature. 2 credits.
8:10 M T Th F FLI 109A WALLACE, H. K.

A critical study of selected taxonomic synopses, revisions, and monographs with special reference to the bearing of the principles and concepts of distribution, genetics, and ecology on taxonomic problems.

BLY. 699.—Research and Thesis. 0 to 6 credits.*

BLY. 799.—Research and Dissertation. 1 to 6 credits.*

BOTANY

BTY. 101.—General Botany. 3 credits.
8:10 T W Th F UAN 120 CODY, M. D.
Laboratory: 12:50-3:00 W F UAN 113

The form, structure, growth, reproduction, and physiology of plants and their various organs.

BTY. 102.—General Botany. 3 credits.
10:30 M T W Th UAN 120 GRIFFITH, M.
Laboratory: 12:50-3:00 T Th UAN 113

Representatives of major groups of plants regarding their classification, life histories and environmental relations.

BTY. 306.—Taxonomy of Higher Plants. 3 credits.
10:30 T Th Greenhouse FORD, E. S.
Laboratory: 12:50-4:10 M W (2 Saturday field trips).

Biology of ferns and seed plants emphasizing their classification and general morphology and identification of their representatives in our flora.

BUILDING CONSTRUCTION**

BCN. 301-302-303-304.—Projects in Building Construction, Group 1. 3 credits each;—group total, 12 credits. Maximum Summer Session load: 9 credits. Prerequisite: Completion of Lower Division program in Building Construction or equivalent.
To arrange E 180

BCN. 311-312-313-314.—Projects in Building Construction, Group 2. 3 credits each;—group total, 12 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series BCN. 301-302-303-304.
To arrange E 177

*Credit assigned must be shown on course assignment card.
**For detailed course description refer to the University Catalog.

BCN. 401-402-403-404.—Projects in Building Construction, Group 3. 3 credits. each;—group total, 12 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series BCN. 311-312-313-314.

To arrange E 178

BCN. 411-412-413-414.—Projects in Building Construction, Group 4. 3 credits each;—group total, 12 credits. Maximum Summer Session load: 9 credits. Prerequisite: The series BCN. 401-402-403-404.

To arrange E 188

GRADUATE COURSES

BCN. 601.—Building Construction. 3 or 6 credits. Prerequisite: Bachelor's degree in Building Construction or Architecture, or equivalent.

To arrange E 188

Advanced studies in building technology or in specialized areas of the building construction field selected by the student and approved by the faculty.

BCN. 602.—Building Construction. 3 or 6 credits. The second half of the course BCN. 601-602.

To arrange E 188

BCN. 603.—Building Research. 3 or 6 credits. Prerequisite: Bachelor's degree in Building Construction, Architecture, or equivalent.

To arrange E 188

Detailed investigation of a selected problem in the building construction field designed to make a significant contribution to present knowledge and practices in that field.

BCN. 604.—Building Research. 3 or 6 credits. The second half of the course BCN 603-604.

To arrange E 188

BCN. 699.—Research and Thesis. 0 to 6 credits.*

For students working for the master's degree. Credits cannot be used to reduce the total course work required for the degree.

BUSINESS EDUCATION

BEN. 81.—Introductory Typewriting. 2 credits.

9:20 Daily and 2 hours to arrange YON 306 CREWS, J. S.

Skill in typewriting developed through practice on personal and business problems.

BEN. 91.—Introductory Shorthand. 3 credits.

10:30 Daily and 2 hours to arrange YON 305 DODSON, G. A.

The theory of Gregg shorthand is completed, using the functional method.

BEN. 181.—Advanced Typewriting. 2 credits. Prerequisite: BEN. 81 or 82 or permission of department.

10:30 Daily and 2 hours to arrange YON 306 CREWS, J. W.

Provides more intensive training in typewriting.

BEN. 191.—Shorthand Dictation. 3 credits. Prerequisite: BEN. 91 or 92 or permission of department.

9:20 Daily and 2 hours to arrange YON 305 DODSON, G. A.

Dictation developed, with emphasis on speed, accuracy, and shorthand skills.

BEN. 291.—Shorthand Dictation and Transcription. 2 credits. Prerequisite: BEN. 181 and 191 or permission of department. This course is needed for obtaining state certification as a teacher of shorthand.

8:10 Daily and 2 hours to arrange YON 306 DODSON, G. A.

Provides opportunity for developing a higher degree of skill in taking dictation and transcribing shorthand notes on the typewriter.

*Credit assigned must be shown on course assignment card.

BEN. 352.—Office Machine Techniques. 2 credits. Prerequisite: BEN. 81 or permission of department.

8:10 Daily YON 305 CREWS, J. W.

The voice-writing machines, duplicating machines, adding machines and calculating machines are studied, both as to techniques and operation. The student will be given opportunity to develop skill in the operation of these machines.

GRADUATE COURSES

BEN. 652.—Teaching Office Machines. (Formerly BEN 552) 3 credits. Prerequisite: BEN. 352 or equivalent.

8:10 Daily and 2 hours to arrange YON 305 CREWS, J. W.

Methods of teaching the operation of machines commonly used in business offices.

BEN. 685.—Problems in Business Education (Formerly BEN. 585). 3 credits.

9:20 Daily YON 43 MOORMAN, J. H.

Areas of interest of students enrolled will be studied intensively. Problems in business education in Florida schools will be emphasized. Each student will prepare a written report of his study.

BEN. 705.—Seminar in Business Education (Formerly BEN. 605). 3 or 6 credits.

10:30 Daily YON 43 MOORMAN, J. H.

For advanced graduate students. Intensive study of specific problems of paramount importance in business education.

BUSINESS ORGANIZATION AND OPERATION

BS. 231.—Principles of Marketing. 3 credits. Prerequisite: ES. 205-206.

10:30 Daily MAT 219

The institutions and methods developed for carrying on trade operations; retail and wholesale agencies; elements of marketing efficiency; the cost of marketing; price maintenance; unfair competition; the relation of the government to marketing.

BS. 260.—Fundamentals of Insurance. 3 credits.

8:10 Daily MAT 111 SWEENEY, V. V.

The basic fundamentals underlying the business of insurance as a prerequisite for more advanced and detailed work in the subject designed to serve two distinct needs: (1) to give students of economics and commerce a general knowledge of the subject; and (2) to lay a foundation for the future work of those interested in entering the business.

BS. 271.—Principles of Management. 3 credits.

11:40 Daily MAT 114

The basic fundamentals of management underlying the solution of problems of organization and operation of business enterprises. Application of these fundamentals to specific fields of industrial management such as production, material, personnel, purchasing, etc.

BS. 334.—Sales Management. 3 credits. Prerequisite: BS. 231.

11:40 Daily MAT 223 GOODWIN, F.

The selection and training of salesmen.

BS. 366.—Casualty Insurance. 3 credits. Prerequisite: BS. 260.

10:30 Daily MAT 111 SWEENEY, V. V.

The principles and personal and business uses of casualty insurance. An analysis is made of workmen's compensation, liability, automobile, aviation, accident and health, theft, boiler and machinery, plate glass, and credit insurance.

BS. 373.—Personnel Management. 3 credits.

9:20 Daily MAT 114

A comparison of the critical evaluation of public and private personnel practices and techniques of recruiting, selecting, transferring, promoting, classifying, and training workers. Attention is centered on the problem of training to fit workers for the different types and levels of duties called for by the government, by industry and by other types of business enterprises. Consideration of organization, policies, and procedures of managing men.

BS. 401.—Business Law. 3 credits.

7:00 Daily MAT 222

Contracts: Nature; kinds; agreement; genuineness of assent; consideration; legality; capacity; third parties; discharge; remedies. Agency: Nature; creation; principal and agent; rights and liabilities of third parties; termination. Negotiable Instruments: Nature; kinds; parties; transfer; holders; defenses; discharge.

BS. 402.—Business Law. 3 credits.

9:20 Daily MAT 222

Personal Property: Nature; classification; acquisition of title. Bailments: Nature; classification; termination; pledges and pawns. Carriers: Nature; classification; duties; liabilities. Sales: Nature; formality; transfer of title; warranties; liabilities; rights; remedies; conditional sales. Corporations: Nature; creation; classification; powers; stock; management; rights; liabilities. Partnership: Nature; creation; duties; rights; remedies; liabilities.

BS. 422.—Investments. 3 credits. Prerequisite: BS. 427.

10:30 Daily MAT 13 FLOYD, J. S.

The nature of investments; investment policies and types of securities; analysis of securities; the mechanics and mathematics of security purchases; factors influencing general movements of security prices.

BS. 427.—Corporation Finance. 3 credits.

9:20 Daily MAT 111 MATTHEWS, C. A.

The economics and legal forms of business enterprise; the instruments of business finance; financial problems as they relate to the ordinary operations of the business involving fixed and working capital, income, dividend policy, and current borrowing.

BS. 437.—Retailing. 3 credits. Prerequisite: BS. 231.

8:10 Daily MAT 219

The fundamentals of retailing: problems, policies, trends and procedures in retail distribution.

BS. 459.—Field Work in Marketing. Variable credit.*

To arrange MAT 324 GOODWIN, F.

Up to three credit hours for weekly reports and a final report on problems as they arise in a full time three months period of work, in Sales, Retailing, Advertising, Wholesaling, Credits and Collections, Market Research, or any other work in Marketing under supervision of an approved employer. Open only to students majoring in Marketing, Sales, Retailing, or Advertising curricula only before the last term on the campus, only after completion of a course in the principles of the subject to be practiced, and only with written permission from a sponsoring professor. Complete course regulations may be secured from sponsoring professor. All registrations in this course are subject to these regulations.

BS. 463.—Social Insurance. 3 credits.

8:10 Daily MAT 112 GAITANIS, L. A.

An analysis of the meaning and nature of economic security; the distinctions between social and private insurance; the basic hazards of unemployment, old-age, premature death of breadwinner, sickness, and disability, especially as they apply to low income groups; an evaluation of methods of eliminating, reducing or indemnifying these hazards; the development of Social Insurance in the United States, the existing programs including operations, with special emphasis on Title II (Old Age & Survivors Insurance) of the Social Security Act and Florida's Unemployment Compensation and Workmen's Compensation programs.

GRADUATE COURSES

BS. 629.—International Finance: Monetary Systems. 3 credits. Prerequisite: ES. 321.

8:10 Daily LIB 417 MATTHEWS, C. A.

International monetary systems with special emphasis on the role of central banks. Attention is concentrated on the inter-war period, the factors leading to the breakdown of international financial systems and attempts at reconstruction culminating in the World Bank and the International Monetary Fund.

BS. 634.—Problems of Sales Management. 3 credits.

To arrange MAT 324 GOODWIN, F.

Analysis of the field, the processes, the problems and the policies of sales management.

BS. 699.—Research and Thesis. 0 to 6 credits.*

Directed research and writing for the Master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

BS. 799.—Research and Dissertation. 1 to 6 credits.*

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.

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*Credit assigned must be shown on course assignment card.

CANCER RESEARCH

GRADUATE COURSES

CR. 665.—Cancer Research Seminar. 1-3 credits.
Hours to be arranged

CR. 699.—Research and Thesis. 0 to 6 credits.*
Hours to be arranged

CR. 799.—Research and Dissertation. 1 to 6 credits.*
Hours to be arranged

CHEMICAL ENGINEERING

CG. 347.—Industrial Stoichiometry. 4 credits. Prerequisite: CY. 331. Corequisite: MS. 354, PS 206.
10:30 Daily ENG 320 HARVIN, R. L.
Laboratory 2:00 to 5:20 M W N 205
Industrial processes and calculations, weight balances, gas calculations, combustion processes, vapor pressure, humidity, etc.

CG. 356.—Principles of Chemical Engineering II. 3 credits. Prerequisite: CG 355.
9:20 Daily ENG 320 SCHWEYER, H. E.
The fundamental chemical engineering operations: Flow of fluids, heat transfer, evaporation, humidity and air conditioning and drying.

CG. 361.—Materials of Engineering. 3 credits. Prerequisite: CY. 218.
10:30 Daily ENG 328 SCHWEYER, H. E.
Production, properties and uses of ferrous and non-ferrous metals and alloys, Portland cement, clay products, wood and plastics.

CG. 364.—Chemical Engineering Thermodynamics I. 3 credits. Prerequisite: MS. 354. Corequisites: CY. 402, CG. 356.
8:10 Daily ENG 320 HARVIN, R. L.
The first two laws of thermodynamics and their applications to Chemical Engineering.

GRADUATE COURSES

CG. 699.—Research and Thesis. 0 to 6 credits.*

CG. 799.—Research and Dissertation. 1 to 6 credits.*

CHEMISTRY

CY. 121—General Chemistry. 4 credits.
9:20 Daily LEI 207
Laboratory 12:50-4:10 M W LEI 138
Fundamental laws and theories of chemistry. Non-metalic elements and their compounds; metals and their compounds and some of their uses.

CY. 122.—General Chemistry. 4 credits.
9:20 Daily LEI 212
Laboratory 12:50-4:10 T Th LEI 138
The second half of the course CY: 121-122.

CY. 123.—Qualitative Analysis. 3 credits. Prerequisite: CY. 122.
10:30 M T Th F LEI 212
Laboratory 12:50-4:10 M W LEI 236
Theoretical principles and laboratory techniques involved in the qualitative detection of the common metals and acid radicals.

*Credit assigned must be shown on course assignment card.

CY. 217.—General Chemistry and Qualitative Analysis. 4 credits. Prerequisites: Upper percentile rating in placement tests in physical sciences and mathematics or satisfactory completion of C-2. In general, freshmen should present evidence that they have had high school chemistry. Prerequisite or corequisite: MS. 105.

8:10 Daily LEI 207

Laboratory 12:50-4:10 T Th LEI 136

A course in general chemistry including the fundamentals of qualitative analysis.

CY. 218.—General Chemistry and Qualitative Analysis. 4 credits.

10:30 Daily LEI 207

Laboratory 12:50-4:10 M W LEI 136

The second half of the course CY. 217-218.

CY. 301.—Organic Chemistry. 4 credits. Prerequisite: CY. 331.

9:20 Daily LEI 154

Laboratory 12:50-4:10 T Th LEI 238

Preparation and properties of the various aliphatic and aromatic compounds.

CY. 331.—Introductory Quantitative Analysis. 4 credits. Prerequisite: CY. 123 or CY. 218.

8:10 M T Th F LEI 142

Laboratory 12:50-4:10 M T W Th LEI 112

Theoretical principles and laboratory technique involved in quantitative determinations. Determinations include gravimetry, acidimetry and alkalimetry, oxidimetry and iodimetry.

CY. 362.—Organic Chemistry. 3 credits. Prerequisite: CY. 122 or CY. 218. Corequisite: CY. 363, except for Physics majors.

8:10 Daily LEI 154

A brief elementary course embracing the more important aliphatic and aromatic compounds.

CY. 363.—Organic Chemistry Laboratory. 2 credits. Corequisite: CY. 362.

12:50-4:10 M T Th F LEI 238

CY. 402.—Physical Chemistry. 3 credits. Prerequisite: CY. 401. Corequisite: CY. 406, except for Physics majors.

9:20 Daily LEI 142

Colloids, electricity as applied in chemistry, chemical kinetics, photochemistry and introduction to quantum theory.

CY. 406.—Physical Chemistry. 1 credit. Corequisite: CY. 402.

12:50-4:10 W F LEI 204

GRADUATE COURSES

CY. 656.—Biochemical Preparations. 3 credits.

To arrange

The techniques of extraction, separation and purification of biological compounds.

CY. 699.—Research and Thesis. 0 to 6 credits.*

CY. 799.—Research and Dissertation. 1 to 6 credits.*

CIVIL ENGINEERING

CL. 223.—Surveying. 3 credits. Prerequisite: MS 105.

(Register for the Lecture Section and one Laboratory Section)

Lecture Section 1. 8:10 M T W Th ENG 432 KATTERHENRY, A. A.

*Credit assigned must be shown on course assignment card.

Laboratory Sections:
Section 11. 2:00 to 5:20 M W ENG 320 KATTERHENRY, A. A.
Section 12. 2:00 to 5:20 T Th ENG 432 KATTERHENHY, A. A.

Use of surveyors tape; level and transit; traversing and balancing surveys; calculation of areas; topographic mapping; land subdivision; adjustment of instruments.

CL. 226.—Higher Surveying. 2 credits. Prerequisite: CL. 223.
12:50 M W ENG 432 WINSOR, A. N.
Laboratory 2:00 to 5:20 T Th ENG 324 WINSOR, A. N.

Triangulation systems; precise base-line measurement; map projections; coordinate systems; precise levels; line azimuth by Solar and Polaris observations; hydrographic surveys; introduction to photogrammetry; horizontal curves; cross-sections.

CL. 326.—Statics of Simple Structures. 4 credits. Prerequisite: EM 365.
10:30 Daily ENG 324 OZELL, A. M.
Laboratory 2:00 to 5:20 M W ENG 324 OZELL, A. M.

Application of the methods of statics to structural analysis; a correlation between graphical and analytical methods; moments, shears, reactions, resultants, stress diagrams, and influence lines for statically determinate structures.

GRADUATE COURSES

CL. 623.—Advanced Concrete Structures. 3 credits. Prerequisite: CL. 433.
To arrange. KLUGE, R. W.

Study of research in reinforced concrete particularly in connection with development of building code requirements; ultimate load theories and their application to design; prestressing; special design problems.

CL. 630.—Problems in Sanitation. 3 credits. Prerequisites: CL 329, CL 429 or permission of instructor.
To arrange JAFFE, T.

Approved problems for study or research selected from any field of sanitary specialization.

CL. 638.—Analysis of Statistically Indeterminate Structures. 1 to 6 credits.. Prerequisite: CL. 338.
To arrange. OZELL, A. M.

Frames with variable moment of inertia closed rings; column analogy; secondary stresses; continuous trusses; columns; design problems, precise moment distribution.

CL. 699.—Research and Thesis. 0 to 6 credits.*

COMMUNICATIONS

COM. 311.—Speech Training for the Radio. 3 credits. Prerequisite: SCH. 250 or SCH. 307.
10:30 Daily ADM 357 J. C. WEAVER

Practice in announcing, narrating, and writing.

COMMUNITY PLANNING

CPG. 301-302-303.—Special Studies in Planning. 3 hours conference, 30 hours studio work. 3 credits each unit. Prerequisite: Recommendation of Adviser for Community Planning. The courses in this series may not be taken for credit by students majoring in Architecture, Building Construction, Interior Design, or Landscape Architecture.
To arrange X 3

Special studies in planning adjusted to the needs of seniors and graduate students whose lack of foundation in physical design indicates a need for such studies before pursuing more advanced work.

*Credit assigned must be shown on course assignment card.

CPG. 501-502-503-504-505.—Projects in Planning. 1 hour conference, 35 hours research and studio work. 3 credits each; group total, 15 credits. Prerequisite: Permission of the faculty. Corequisite: A program of electives in related fields approved by the faculty. Maximum Summer Session load 9 credits.

To arrange X 3

Basic concepts, problems and practices of community planning. Research into the inter-related social, economic, and physical problems of towns and cities, metropolitan areas, and regions; the preparation and analysis of tentative plan solutions.

CPG. 699.—Research and Thesis. 0 to 6 credits.*

For students working for the master's degree.

DAIRY SCIENCE

DY. 211.—Introduction to Dairy Science. 3 credits.

9:20 M T W Th DAL 203 WILKOWSKE, H. H. and WING, J. M.

Laboratory: 12:50-4:10 M W DAL 110

Composition and properties of milk; sanitary milk production; common methods of analyzing milk; common dairy processes; farm methods of handling milk.

DY. 418.—Approved Dairy Practice. 3 credits.

To arrange.

Practical experience on approved dairies or in approved dairy plants.

DY. 420.—Problems in Dairy Technology. 3 credits.

To arrange.

Qualified students may choose an approved problem covering some phase of dairy technology.

GRADUATE COURSES

DY. 623.—Problems in Dairy Production. Variable credit.*

To arrange.

Research for majors in dairy husbandry.

DY. 627.—Advanced Dairy Microbiology. 4 credits.

To arrange WILKOWSKE, H. H.

Advanced methods of microbiological control of dairy products.

DY. 699.—Research and Thesis. 0 to 6 credits.*

ECONOMICS

ES. 203.—Elementary Statistics. 4 credits. Prerequisite: C-42 or equivalent.

9:20 Daily MAT 118 KARP, J. R.

Laboratory: 2:00-4:10 M W MAT 120

The statistical method as a tool for examining and interpreting data; acquaintance with such fundamental techniques as find application in business, economics, biology, agriculture, psychology, sociology, etc.; basic preparation for more extensive work in the field of statistics.

ES. 205.—Basic Economics. 3 credits.

(Register for one section only.)

Section 1 9:20 Daily MAT 116 FENLON, P. E.

Section 2 10:30 Daily MAT 116 MERCER, N. A.

After a preliminary discussion of the nature, scope, and method of economics, economic concepts, and economic institutions, this half of the course in Basic Economics, ES. 205-206, deals primarily with the theories of production, determination of prices, and distribution of income.

ES. 206.—Basic Economics. 3 credits.

(Register for one section only.)

Section 1 7:00 Daily MAT 11 FENLON, P. E.

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*Credit assigned must be shown on course assignment card.

Section 2 9:20 Daily MAT 11 LOWE, J. W.
Section 3 10:30 Daily MAT 11 DUNN, E. S.

This half of the course ES. 205-206, for which separate credit may be earned, emphasizes the accounting, analytical, and policy aspects of national income and product, along with such closely related topics as governmental finance, money and banking, and international trade and finance. Some attention is also given to the problems of industrial relations, monopolies, transportation and public utilities, and to the leading alternatives to capitalism.

ES. 208.—Economic History of the United States. 3 credits.
9:20 Daily MAT 102 TUTTLE, F. W.

The industrial development of America; the exploitation of natural resources; the history of manufacturing, banking, trade, transportation, etc.; the evolution of industrial centers; the historical factors contributing to the growth of the United States.

ES. 321.—Money and Banking. 3 credits. Prerequisite: ES. 205-206.
8:10 Daily MAT 13 FLOYD, J. S.

A study of money systems and standards; of the factors determining the size of the money supply with special emphasis on the role of commercial and central banks and government fiscal policy; and of the relationship between money, prices, and production and employment.

ES. 327.—Public Finance. 3 credits. Prerequisites: ES. 205-206.
9:20 Daily MAT 223 DONOVAN, C. H.

Principles governing expenditures of modern government; sources of revenue; public credit; principles and methods of taxation and financial administration as revealed in the fiscal systems of leading countries.

ES. 347.—Principles of Foreign Trade. 3 credits. Prerequisite: ES. 206.
10:30 Daily MAT 102 BRADBURY, R. W.

Fundamental principles of foreign trade; significance of geographic, economic, social, and political influences; current practices and development in foreign trade; products of international commerce, protective tariffs and other barriers to world trade; tendencies in the foreign trade of the United States.

ES. 372.—Labor Problems. 3 credits. Prerequisites: Es. 205-206.
12:50 Daily MAT 222 FRISTOE, C. W.

Labor problems; insecurity, wages and income, hours, sub-standard workers, industrial conflict, attempts to solve labor problems by employers; personnel management, employee representation, employers' associations; attempts to solve labor problems by state; protective labor legislation, laws relating to settlement of industrial disputes.

ES. 407.—Economic Principles and Problems. 3 credits. Prerequisites: ES. 205-206.
8:10 Daily MAT 116 MERCER, N. A.

An advanced course in economic theory, dealing especially with the theories of production, price determination, and income distribution and their application to a selected list of current economic problems.

ES. 408.—Economic Principles and Problems. 3 credits. The second half of the course ES. 407-408.
8:10 Daily MAT 114 DUNN, E. S.

ES. 409.—Comparative Economic Systems. 3 credits.
9:20 Daily MAT 112 BLODGETT, R. H.

The economics of capitalism, socialism, communism, and fascism. The theoretical economics of capitalism, socialism, and communism and the actual economics of the United States, Soviet Russia, England, Nazi Germany, and Fascist Italy are compared on the basis of such matters as industrial production, agriculture, exchange, credit and banking, income distribution, the status of labor, and international trade. Marxian Socialism is also considered briefly.

ES. 429.—Introduction to Business Cycles. 3 credits. Prerequisite: ES. 321.
11:40 Daily MAT 118 KARP, J. R.

An introduction to the principal theories of the business cycle including also a description of the various types of cycles and an examination of the important remedies that have been proposed.

GRADUATE COURSES

ES. 610.—The Development of the American Economy to 1860. 3 credits.
2:00-5:20 M LIB 417 TUTTLE, F. W.
2:00-4:10 Th

A functional approach to the study of the economic development of the United States. World economic conditions that lead to the settlement of America; the colonial period; the period of economic transition; the westward movement and the rise of a national economy; and economic causes of the Civil War.

ES. 674.—Labor Economics. 3 credits.
9:20-11:30 M LIB 417 FRISTOE, C. W.
9:20-12:40 Th

The seminar in wage theory has for its purpose an intensive and advanced study of the various theories of wage determination and the economic role of wages in the economy.

ES. 677.—Governmental Debt. 3 credits.
To arrange MAT 209 KILPATRICK, W.

Influences and mechanisms for debt incurrence and retirement by federal, state, and local governments. Problems of debt use and abuse, regulations, area planning, and intergovernmental relations. Emphasizes case studies.

ES. 692.—Neo-Classical Economics. 3 credits. The second half of the course ES. 691-692.
2:00-5:20 T LIB 417 BLODGETT, R. H.
2:00-4:10 F

Analysis, criticism, and restatement of neo-classical theories concerning the distribution of income. Rent, interest, wages, profits, personal distribution, supplementary distribution, and non-capitalistic distribution will be considered. The writings of Marshall, Hicks, Cassel, Boulding, Pigou, Fisher, Douglas, Knight, Stigler and Schumpeter provide the background for the discussion.

ES. 699.—Research and Thesis. 0 to 6 credits.*

Directed research and writing for the Master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

ES. 799.— Research and Dissertation. 1 to 6 credits.*

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.

EDUCATION—GENERAL

ED. 300.—Principles and Practices for Teaching Handicapped Children (Formerly EN. 426). 3 credits. Prerequisite: EDF. 140-141 Or equivalent.
9:20 Daily I 101 SULLIVAN, K.

Consideration is given to exceptional children as commonly found in our public schools. All students, particularly teachers, will find answers to incidence, causes, diagnosis, agencies for referral, and recommended teaching procedures in respect to the blind, partially-seeing, deaf, hard-of-hearing, speech defective, crippled, mentally retarded, mentally superior, and socially and emotionally disturbed.

ED. 418.—Audio-Visual Materials of Instruction (Formerly EN. 418.). 3 credits.
8:10 Daily YON 140 MC KAY, J. H.

A general course for teachers at all grade levels. Presents sources and methods of using audio-visual materials of instruction.

ED. 500.—Materials and Methods for Teaching Slow Learners (Formerly EN. 428). 3 credits. Prerequisite: ED. 300 or PSY. 312.
8:10 Daily I 203 ROSEBROOK, W.

Programs will be constructed which will correlate skill subjects with the cores of interest. Curricular materials will be considered which can be used to teach children who are mentally handicapped, at various maturation levels and in various situations. Classroom teachers would find this course helpful.

ED. 503.—Methods of Teaching Crippled Children (Formerly EN. 429). 3 credits. Prerequisite: ED. 300 or PSY. 312.
11:40 Daily I 101 SULLIVAN, K.

An analysis is made of academic difficulties and needs due to specific handicaps. Consideration is given to maintaining a normal school program for each child.

GRADUATE COURSES

NOTE: Orientation Meeting for all graduate students in Education, Thursday, June 23, 7:00 p.m., in Yonge Auditorium. This meeting will be devoted to a discussion of policies and programs for graduate students in the College of Education.

*Credit assigned must be shown on course assignment card.

ED. 600.—Teaching Exceptional Children (Formerly EN. 539). 3 credits. Prerequisite: ED. 300 or PSY. 312.

10:30 Daily I 101 ROSEBROOK, W.

An advanced course in the care, treatment, and education of children with problems and handicaps.

ED. 610.—Principles of Guidance (Formerly EN. 562). 3 credits.

8:10 Daily I 209 PRESTON, A.

An introduction to the field of student personnel work.

ED. 611.—Occupational Information (Formerly EN. 564). 3 credits.

11:40 Daily I 107 PRESTON, A.

Methods of studying occupations; sources of information concerning employment conditions, job requirements, training facilities, occupational trends; evaluation of occupational literature; use of occupational information in counseling.

ED. 612.—Techniques in Guidance (Formerly EN. 563). 3 credits. Prerequisite: ED. 610 or equivalent; or approval of instructor.

8:10 Daily YON 101 EGAN, E. P.

A survey of the various techniques used by teachers and guidance specialists, with special reference to tests, records, and counseling.

ED. 613.—Personnel Testing (Formerly EN. 534). 3 credits. Prerequisite: EDF. 450 or permission of instructor.

10:30 Daily I 209 LANE, D.

A survey of the principal aptitude tests and inventories used in personnel work, with assigned readings in test literature. Procedures for standardizing and validating tests will be considered, with emphasis on the evaluation of the various instruments for use in personnel work.

ED. 614.—Case Studies in Counseling (Formerly EN. 514). 3 credits. Prerequisites: EDF. 450 and ED. 612 or equivalent.

9:20 Daily I 205 EGAN, E. P.

Competency is developed in the appraisal of diagnostic data obtained from case histories and in the application of counseling theory and techniques. Actual case records will be prepared, studied, and discussed in class.

ED. 618.—The Organization and Administration of Guidance Programs (Formerly EN. 513). 3 credits.

11:40 Daily I 209 STRIPLING, R. O.

Methods of organizing and administering personnel programs in educational institutions.

ED. 630.—Individual Work (Formerly EN. 530). 3 credits.

To arrange YON 302

For advanced students who wish to study individual problems under faculty guidance. Before registering, the student must submit in writing to the coordinator of the course a statement of a proposed problem. Forms for this purpose are available in YON 202.

ED. 631.—Educational Leadership I. (Formerly EN. 557). 3 credits. (Must be taken with ED. 632).

Section 1. 8:10 Daily YON 214 JOHNS, R. L., AHRENS, M., and WATTENBARGER, J. L.

This is a basic leadership course recommended for majors in administration and supervision. Emphasis is given to the development, initiation, and implementation of programs and policies; to goal determination; and to human relationships. Research projects will center around leadership problems of administration and supervision.

ED. 632.—Educational Leadership II. (Formerly EN. 558). 3 credits. (Must be taken with ED. 631).

9:20 Daily YON 214 JOHNS, R. L., AHRENS, M., and WATTENBARGER, J. L.

ED. 633.—Methods and Problems of Supervision (Formerly EN. 536). 3 credits. Prerequisite: EN. 632.

8:10 Daily YON 43

An analysis of supervisory practices used in improving instruction.

ED. 651.—Audio-Visual Education (Formerly EN. 506). 3 credits.
Section 1. 9:20 Daily YON 140 CATE, C. A.
Section 2. 11:40 Daily YON 140 MC KAY, J. H.
The selection, evaluation and use of audio-visual materials, with emphasis upon projected still and sound motion pictures.

ED. 652.—Production and Utilization of Audio-Visual Materials. 3 credits. Prerequisite: ED. 651 or consent of instructor.
10:30 Daily YON 140 CATE, C. A.
Laboratory: To arrange
Designed to train materials supervisors, audio-visual coordinators, and other school personnel in the production of materials by photographic processes, and the operation of materials centers.

ED. 655.—Mental Health in the Classroom (Formerly EN. 515). 3 credits.
12:50 Daily YON 232 LAIRD, D.
To assist teachers in the personality development of children.

ED. 657.—Florida Workshop: Bulletin Series Division (Formerly EN. 555). 6 credits.
9:20-11:30 Daily YON 43 MOORMAN, J. H. and STAFF
This course provides organization, materials, and assistance for a group of teachers engaged in the preparation of bulletins for professional groups for use in the Florida Program for the Improvement of Instruction. Membership is limited to a selected group.

ED. 658.—Florida Workshop: Bulletin Series Division (Formerly EN. 556) 6 credits. A continuation of ED. 657.
9:20-11:30 Daily YON 43 MOORMAN, J. H., and STAFF

ED. 659.—Laboratory in Corrective Reading (Formerly EN. 576). 6 credits.
10:30-12:50 Daily AND 310 SPACHE, G. D.
Intensive study of the diagnosis, correction, and prevention of reading difficulties, in both elementary and secondary schools; work with children in the application of principles under study.

ED. 699.—Research and Thesis. 0 to 6 credits.*
To arrange YON 202 FOSTER, C. R.

ED. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange YON 202 FOSTER, C. R.

EDUCATION—ADMINISTRATION

GRADUATE COURSES

EDA. 600.—Educational Organization and Administration (Formerly EN. 522). 3 credits.
Section 1. 10:30 Daily YON 134
Section 2. 11:40 Daily YON 134

EDA. 601.—Organization and Administration of Elementary Schools. (Formerly EN. 524). 3 credits.
10:30 Daily YON 222 EGGERT, C. L.

EDA. 602.—Organization and Administration of Secondary Schools (Formerly EN. 518). 3 credits.
12:50 Daily YON 222 EGGERT, C. L.

EDA. 603.—Public School Business Administration and Finance (Formerly EN. 521). 3 credits.
11:40 Daily YON 222 JOHNS, R. L.

*Credit assigned must be shown on course assignment card.

EDA. 609.—Problems in School Administration and Supervision (Formerly EN. 590). 3 credits.
To arrange YON 128 JOHNS, R. L.

EDA. 630.—Individual Work (Formerly EN. 530). 3 credits.
To arrange YON 128 JOHNS, R. L.

EDA. 699.—Research and Thesis. 0 to 6 credits.*
To arrange YON 130 LEPS, J. M.

EDA. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange YON 128 JOHNS, R. L.

EDUCATION—ELEMENTARY

EDE. 400.—Problems of Instruction. (Formerly EN. 471). 3 credits.
10.30 Daily I 201 TISON, J. P.

The course in elementary curriculum required for certification to teach in grades 1-12 in certain specialized fields.

EDE. 550.—The Teaching of Arithmetic. 3 credits.
9.20 Daily I 201 DWYER, R. E.

The purpose of the course is to help teachers of elementary and junior high schools gain an understanding of arithmetic concepts, symbolism, and teaching materials and procedures.

EDE. 560.—Teaching Science in the Elementary School. (Formerly EN. 509). 3 credits. Prerequisite: GL. 301 or equivalent, or permission of instructor.
11:40 Daily YON 150 PILTZ, A.

Content, methods, materials and approaches to use in teaching science in the elementary school.

EDE. 570.—Teaching of Reading (Formerly EN. 480). 3 credits.
8:10 Daily I 201 DWYER, R. E.

A comprehensive survey of the problems of teaching reading in all grades and practical procedures for attacking these problems.

GRADUATE COURSES

EDE. 600.—Elementary School Curriculum. (Formerly EN. 501). 3 credits.
Section 1. 10:30 Daily YON 226 NESBITT, M.

A survey of the content and methods of the elementary school curriculum. Offered primarily for students who have not taken a course in elementary curriculum and who have not had teaching experience in the elementary schools.

EDE. 601.—Practices in Elementary Education I. (Formerly EN. 545). 3 credits.
8:10 Daily YON 311 GREEN, E. K.

Orientation course for majors in graduate work in elementary education with emphasis upon modern practices in elementary education.

EDE. 603.—Early Childhood Education, I (Formerly EN. 584). 3 credits.
8:10 Daily YON 226 MC CRACKEN, J. M.

To assist teachers of children of pre-school and early school age.

EDE. 630.—Individual Work (Formerly EN. 530). 3 credits.
To arrange YON 102 HILLIARD, P.

Provided for advanced students under supervision of a staff member.

EDE. 635.—Supervision of Pre-Service Teachers, I. (Formerly EN. 537). 3 credits.
9:20 Daily YON 311 HAINES, A.

Problems and issues of pre-service teacher education, with particular emphasis on procedures of supervising interns.

EDE. 660.—Science Education in the Elementary School (Formerly EN. 509). 3 credits. Prerequisite: EDE. 560 or equivalent, or permission of instructor.
8:10 Daily YON 142 BINGHAM, N. E.

Current problems in teaching science in elementary schools, new materials and techniques of teaching, recent developments in the sciences and their implications.

EDE. 671.—Language Arts in the Elementary School—Creative Expression (Formerly EN. 588). 3 credits.
9:20 Daily YON 226 NESBITT, M.

Emphasis upon literature for young children and the arts related to it. These arts include illustrations, dramatization, puppetry and other dramatic forms, storytelling, creative writing, and evaluation and study of children's books in terms of their interests and needs.

EDE. 675.—Trends in the Teaching of Reading (Formerly EN. 575). 3 credits.
10:30 Daily YON 311 MC CRACKEN, J. M.

Analysis of trends in the teaching of reading as shown in current methods and research. Includes consideration of purposes and aims, skills and attitudes, informal and formal reading tests.

EDE. 699.—Research and Thesis. 0 to 6 credits.*
To arrange YON 102 HILLIARD, P.

EDE. 700.—Problems in Elementary Education, I (Formerly EN. 547). 3 credits.
11:40 Daily YON 226 HILLIARD, P.

An advanced course in elementary school problems.

EDE. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange YON 102 HILLIARD, P.

EDUCATION—FOUNDATIONS

EDF. 220.—Children and Culture (Formerly SCL. 205). 3 credits.
8:10 Daily I 107 HILL, T. J.

A study of effects upon children of the social, economic, geographic, and other circumstances of community life.

EDF. 221.—Children and Culture (Formerly SCL. 206). 3 credits.
9:20 Daily I 209 HILL, T. J.

EDF. 360.—Elementary Statistical Methods in Education (Formerly EN. 316). 3 credits.
2:00 Daily YON 316

Application of selected techniques to organization and interpretation of educational data.

EDF. 440.—Child Development (Formerly EN. 385). 3 credits.
11:40 Daily YON 138 MC LENDON, I. R.
(Reserve time for observation during the forenoon)

Growth and development of children into mature personalities.

EDF. 442.—Educational Psychology (Formerly EN. 386). 3 credits.
10:30 Daily YON 138 MC LENDON, I. R.
(Reserve time for observation during the forenoon)

Application of psychological principles to the education process; individual differences; principles of learning; transfer of training; the nature of reasoning.

EDF. 450.—Measurement and Evaluation of School Practices (Formerly EN. 317).
12:50 Daily YON 138 LAIRD, D. S.

Study of basic principles and methods of measurement; evaluation of pupil learning in school.

GRADUATE COURSES

EDF. 600.—History of Education (Formerly EN. 510). 3 credits.
9:20 Daily YON 138 ANDERSON, A. W.

Attempt is made to evaluate present-day education by tracing back to their beginnings such dominant factors as the teacher, the curriculum, the school plant, and the sources of support and control for schools.

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*Credit assigned must be shown on course assignment card.

EDF. 610.—Democracy and Education (Formerly EN. 508). 3 credits.
Section 1. 8:10 Daily YON 232 BROUDY, H.
Section 2. 11:40 Daily YON 232 BROUDY, H.
A study of the reciprocal relationships of democracy and education.

EDF. 620.—Socio-Economic Foundations of Education (Formerly EN. 540). 3 credits.
Section 1. 8:10 Daily YON 228 ANDERSON, A. W.
Section 2. 11:40 Daily YON 228 MUNTYAN, B.
The socio-economic bases for education are comprehensively surveyed.

EDF. 630.—Individual Work (Formerly EN. 530). 3 credits.
To arrange YON 239 LEWIS, H. G.
This course is provided for advanced students who wish to study individual problems under faculty guidance.

EDF. 640.—Problems in Pupil Development and Learning (Formerly EN. 542). 3 or 6 credits.
Section 1. 3 credits. 9:20 Daily YON 232 CUNNINGHAM, M. T., KNIGHT, J., and STAFF
Laboratory: 2:00-3:30 Daily YON 232
Section 2. 6 credits. 9:20-11:40 Daily YON 228 CUNNINGHAM, M. T., KNIGHT, J., and STAFF
Laboratory: 2:00-4:30 Daily YON 228
Study is made of problems of particular interest to students in the field of pupil growth and learning.

EDF. 641.—Educational Implications of Personality Theory. 3 credits.
12:50 Daily YON 228 COMBS, A. W.
An examination of the dynamics of behavior and its implication for education.

EDF. 642.—Problems in Educational Psychology (Formerly EN. 541). 3 credits.
Section 1. 11:40 Daily YON 236 CUMBEE, C. F.
Individuallzed study of problems dealing with child development, adolescence, learning, and other areas of educational psychology.

EDF. 650.—Measurement and Evaluation (Formerly EN. 503). 3 credits. Prerequisite: EDF. 360.
9:20 Daily YON 316 SCATES, D. E.
Problems in test construction will be studied.

EDF. 699.—Research and Thesis. 0 to 6 credits.*
To arrange YON 239 LEWIS, H. G.

EDF. 720.—School and Society (Formerly EN. 640). 3 credits.
10:30 Daily I 205 LEWIS, H. G.
Provides a social and philosophic frame of reference through a rigorous study of the society in which education takes place, and the implications of this society for the functioning of the school. Conducted on a seminar basis. Limited to students in the sixth year program of teacher education and candidates for the doctor's degree in education.

EDF. 730.—World Trends in Education (Formerly EN. 617). 3 credits.
9:20 Daily I 205 HETENYI, L. J.
An analysis and synthesis of the role of education in promoting contemporary national and international goals.

EDF. 760.—Techniques of Research (Formerly EN. 604). 3 credits.
8:10 Daily YON 316 SCATES, D. E.
Training is given in identifying research problems, selecting and organizing useful means for research, methods of gathering data, and best practices for interpreting and reporting observed phenomena.

EDF. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange YON 239 LEWIS, H. G.

*Credit assigned must be shown on course assignment card.

EDUCATION—SECONDARY

EDS. 300.—The Secondary School Program, I. (Formerly EN. 301). Class and laboratory. 3 credits. EDS. 300 and EDS. 301 should be taken concurrently.
8:10 Daily YON 134 HOCK, L. E.

The function and program of the secondary school, and the role of the teacher. Classwork is organized around the problems and issues facing secondary education today.

EDS. 301.—The Secondary School Program, II. (Formerly EN. 302). Class and laboratory. 3 credits. EDS. 301 and EDS. 300 should be taken concurrently.
9:20 Daily YON 134 HOCK, L. E.

EDS. 550.—Teaching Mathematics in the Secondary School. (Formerly EN. 309). 3 credits.
10:30 Daily YON 316 PHILLIPS, W. B.

Contributions of mathematics to the education of high school youth; trends in the teaching of mathematics; techniques of teaching basic mathematical concepts and skills in the junior and senior high school.

EDS. 560.—Teaching Science in the Secondary School. (Formerly GL. 305). 3 credits.
10:30 Daily YON 142 GLENN, E. R.

Content, methods, materials, and approaches to use in teaching science in the secondary school.

GRADUATE COURSES

EDS. 600.—Foundations of Secondary School Curriculum (Formerly EN. 519). 3 credits.
Section 1. 8:10 Daily YON 222 PRINDIVILLE, G.

An analysis of the assumptions underlying the secondary school, the research on which present-day programs are based and the emerging patterns in secondary school curricula.

EDS. 601.—The Junior High School Curriculum (Formerly EN. 516). 3 credits.
9:20 Daily YON 222 PRINDIVILLE, G.

Teachers, principals, and supervisors are given an opportunity to analyze and to evaluate the curriculum offerings in the modern junior high school. Emphasis will be placed on developing a school program to meet the needs of early adolescents.

EDS. 602.—The Secondary School Curriculum (Formerly EN. 527). 3 credits.
Section 1. 8:10 Daily YON 138 FULLAGAR, W. A.
Section 2. 12:50 Daily YON 134 FULLAGAR, W. A.

An analysis of the scope, functions, and types of secondary school curricula. Consideration will be given to criteria for judging the secondary school curriculum and ways of improving existing programs.

EDS. 603.—Community College Education. (Formerly EN. 585). 3 credits.
11:40 Daily YON 214 WATTENBARGER, J. L.

An analysis of the program and problems of the community college.

EDS. 605.—Evaluation of the Secondary School Program (Formerly EN. 538). 3 credits.
9:20 Daily YON 142 DURRANCE, C. L.

A study of procedures and of techniques by which secondary school programs may be evaluated.

EDS. 630.—Individual Work (Formerly EN. 530). 3 credits.
To arrange YON 329 WILES, K.

This course is provided for advanced students studying individual problems.

EDS. 635.—Supervision of Pre-Service Teachers, I. (Formerly EN. 537). 3 credits.
11:40 Daily YON 311 DURRANCE, C. L.

A study of the function of the directing teacher in the internship program and the problems and procedures of supervising the work of interns.

EDS. 640.—Social Studies in the Secondary School (Formerly EN. 559). 3 credits.
10:30 Daily I 203

Consideration of the problems of teachers, supervisors, and principals in teaching social studies in grades seven through fourteen. Trends, basic principles, recent improvements in methods and materials will be emphasized. Each student will be given opportunity to develop understandings and skills in a special problem in the social studies.

EDS. 650.—Mathematics in the Secondary School (Formerly EN. 579). 3 credits.
11:40 Daily YON 316 PHILLIPS, W. B.

Selection and use of resource materials in junior and senior high school mathematics; current problems in the teaching of mathematics; laboratory experiences in surveying, preparation of displays, construction of equipment, and examination of films and other types of materials.

EDS. 670.—Language Arts in the Secondary School (Formerly EN. 550). 3 credits.
10:30 Daily YON 214 MC GUIRE, V.

Gives opportunity to principals, supervisors, graduate students, and in-service teachers to work on their own problems at the various levels in grades seven through fourteen. Present trends, basic principles, methods, and materials will be considered.

EDS. 690.—Student Activities in the Secondary School (Formerly EN. 552). 3 credits.
11:40 Daily I 201

An exploration of the purposes, phases, and operations of student activities to assist student activity directors, activity sponsors, and principals in improving the school activities program.

EDS. 699.—Research and Thesis. 0 to 6 credits.*
To arrange YON 329 WILES, K.

EDS. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange YON 329 WILES, K.

EDUCATION—VOCATIONAL AGRICULTURE

EDV. 303.—Methods in Vocational Agriculture (Formerly EN. 303). 3 credits.
10:30 Daily YON 150 GARRIS, E. W.

General methods of teaching vocational agriculture.

EDV. 630.—Individual Work (Formerly EN. 530). 3 credits.
To arrange YON 136 GARRIS, E. W.

EDV. 699.—Research and Thesis. 0 to 6 credits.*
To arrange YON 136 GARRIS, E. W.

ELECTRICAL ENGINEERING

EL. 211.—Introduction to Electrical Engineering. 3 credits. Corequisites: PS. 206, MS. 354.
9:20 Daily ENG 346

A course to provide sophomore students who are planning to enroll in the Department of Electrical Engineering with basic knowledge of fundamentals of electric, magnetic and dielectric circuits, and direct current methods of measurements.

EL. 342.—Elements of Electrical Engineering. 3 credits. The second half of the course EL 341-342. Prerequisite: EL 341.
9:20 Daily ENG 334

For engineering students not majoring in electrical subjects. Representation of alternating current by vectors and complex quantities; measurement of power in single phase and polyphase circuits; generations, transmission, and utilization of electrical energy; characteristics of a.c. machinery; testing of a.c. equipment.

*Credit assigned must be shown on course assignment card.

EL. 343.—Elements of Electrical Engineering. 3 credits. Prerequisites: MS 354, PS 206.

11:40 Daily ENG 346

For students majoring in Civil Engineering. The course covers as much of the power field of Electrical Engineering as possible within the allotted time, including electric and magnetic circuits, theory and application of direct and alternating current machines, illumination, wiring problems and elementary electronics.

EL. 346.—Elementary Electronics. 4 credits. Prerequisite: EL 361.

9:20 Daily ENG 328

Laboratory 12:50 to 4:10 M W ENG 450

Basic principles of electron-tubes and electron-tube circuits, vacuum tubes as circuit elements, amplifiers. Classroom and laboratory examples taken from the fields of telephone and radio communications, and electron instrumentation.

EL. 350.—Electrical Laboratory. 1 credit. The second half of the course EL. 349-350. Corequisite: EL. 342.

12:50 to 4:10 T Th ENG 230

A laboratory course for engineering students not majoring in electrical engineering. Experimental studies and test of alternating current circuits and apparatus.

EL. 362.—Electric Circuits. 4 credits. The second half of the course EL 361-362. Prerequisite: EL 361.

8:10 Daily ENG 328

Laboratory 12:50 to 4:10 T Th ENG 424

Unbalanced polyphase circuits; filters; elements of transmission lines; symmetrical components; nonsinusoidal waves; transient conditions; laboratory experiments in measurements; study of instruments, and verification of theorem.

EL. 493.—Electrical Design and Experimental Procedure. Variable credit.*

To arrange

Special projects are studied and reports prepared thereon.

GRADUATE COURSES

EL. 654.—Theory of Communication. 3 credits.

To arrange.

Modulation and detection, signal, spectra, noise, and the transmission of information.

EL. 655.—Electromagnetic Fields and Waves. 3 credits. Prerequisite: EL. 564 or equivalent.

To arrange

Electromagnetic theory from the engineering point of view; propagation and reflection of waves, guided waves, resonant cavities, antennas and radiation.

EL. 691.—Special Topics in Electrical Engineering. Variable credit.*

To arrange

Laboratory, lectures, or conference covering specially selected topics in Electrical Engineering.

EL. 699.—Research and Thesis. 0 to 6 credits.*

Directed research and writing. For students working for the master's degree. Credits cannot be used to reduce the total required for the degree.

EL. 799.—Research and Dissertation. 1 to 6 credits.*

Directed research and writing. For students working for the doctor's degree. Credits cannot be used to reduce the total required for the degree.

ENGINEERING MECHANICS

EM. 313.—Fluid Mechanics. 4 credits. Prerequisites: EM 365, MS 354.

9:20 Daily ENG 440

Laboratory 2:00 to 5:20 T Th REE 100

Mechanics of compressible and incompressible fluids. Special emphasis on viscosity effects. Bernoulli's theorem, surface and form resistance, impulse-momentum principle, lift and drag, laws of similarity and dimensional analysis. Study includes statics and dynamics, and the application of basic principles to the flow of fluids through measuring devices and pipes, and around immersed bodies.

*Credit assigned must be shown on course assignment card.

EM. 365.—Engineering Mechanics—Statics. 3 credits. Prerequisites: PS. 205, ML. 182. Corequisite: MS 354.

10:30 Daily ENG 440

Principles of statics: resultants and equilibrium of co-planar force systems; resultants and equilibrium of space force systems; trusses containing two force members; structures containing three force members; friction; centroids; moments of inertia; Mohr's circle.

EM. 366.—Engineering Mechanics—Dynamics. 3 credits. Prerequisites: EM. 365, MS 354.

11:40 Daily ENG 440

Dynamics of particles and rigid bodies for rectilinear translation, curvilinear translation, rotation and plane motion; mass moment of inertia; work and energy; impulse and momentum.

EM. 367.—Strength of Materials. 3 credits. Prerequisites: EM. 365, MS. 354.

8:10 Daily ENG 430

Tension, compression and shear, stresses and strains; combined stresses; Mohr's circle; riveted joints for pressure vessels and structural work; torsion; bending moments; stresses, and deflection of beams; eccentric loading; columns.

EM. 377.—Mechanics of Materials. 4 credits. Prerequisites: EM 365, MS 354.

8:10 Daily and 12:50 T Th ENG 440

Stress and strain, tension, compression, shear, torsion of circular shafts, shear and moment in beams, deflection of beams, riveted and welded connections, combined stresses, columns, fatigue stresses, stress concentration, impact loading.

GRADUATE COURSES

EM. 699.—Research and Thesis. 0 to 6 credits.*

ENGLISH

EH. 133.—Effective Writing. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.

2:00 Daily AND 203 WALKER, B. H.

3:10 W

Designed to aid the student to present his ideas in writing which is not only accurate and clear but pleasing and attractive to the reader. Students are urged to do creative work.

EH. 134.—Contemporary Reading. 3 credits. Prerequisite: C-3, or permission of C-3 Course Chairman.

10:30 Daily AND 204 HODGES, J. R.

Designed to aid the student in planning for himself a well-rounded program in reading, which will serve to keep him abreast of the best in contemporary thought. Some time will be spent in introducing each student to the bibliography and writing in the area of his special professional interest.

EH. 202.—Introduction to the Study of Literature. 3 credits. The second half of the course EH. 201-202. May be taken for credit without EH. 201. Prerequisite: C-3.

8:10 Daily AND 204 STRYKER, D.

Readings and lectures in the great masterpieces of English literature. Selections chiefly from the work of Chaucer, Shakespeare, Milton, Swift, Pope, Wordsworth, Keats, and Browning.

EH. 209.—The Short Story. 2 credits.

9:20 M T W Th AND 212 CONGLETON, J. E.

The understanding and appreciation of the short story as a literary type. Lectures, readings.

EH. 225.—Ideas and Themes in Literature. 3 credits. Prerequisite: C-3.

11:40 Daily AND 212 STRYKER, D.

Readings in some of the masterpieces of the literature of the world, centering around the discussion of enduring themes, such as love, honor, loyalty, patriotism, etc. The choice of particular themes and readings may vary from term to term.

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*Credit assigned must be shown on course assignment card.

EH. 255.—Business Communications. 3 credits. Prerequisite: C-3.
12:50 Daily AND 210 PENROD, J. A.

Instruction and practice in giving short oral reports, dictating and writing the most generally used business letters, and planning and executing short written reports, in accordance with the standards of business usage. The student is introduced to business and professional publications, corporation and municipal reports, and other media of communication.

EH. 306.—Modern English Grammar. 3 credits. Prerequisite: C-3 and C-5.
11:40 Daily AND 210 HARKNESS, D. R.

A systematic review of current English grammar, including attention to functional aspects of sentence structure, punctuation, and other problems of the mechanics of composition.

EH. 366.—Contemporary Literature: Poetry. 3 credits. Prerequisite: C-3 and C-5.
8:10 Daily AND 212 PENROD, J. A.

Reading, critical interpretation, and discussion of modern British and American poetry, with chief emphasis upon recent poetry.

EH. 401.—Shakespeare. 3 credits. Prerequisite: C-3, C-5, and one course in English or Speech.
10:30 Daily AND 210 ROBERTSON, C. A.

Devoted chiefly to the romantic comedies and the history plays, including **A Midsummer Night's Dream, The Merchant of Venice, Much Ado, As You Like It, Twelfth Night, Richard the Second,** and **Henry the Fourth.** As an aid to the reading of Shakespeare, some of the most interesting features of the Elizabethan stage and drama are treated briefly.

EH. 464.—World Drama. 3 credits. Prerequisite: C-3 and C-5.
11:40 Daily AND 204 MURPHREE, A. A.

A survey of world drama from its origins in ancient times down to the rise of realism. Some of the more important plays in the repertorium of dramatic literature, from Aeschylus to Turgenev, will be read, analyzed, and discussed.

EH. 480.—English in the Secondary School. 3 credits. Prerequisite: C-3, C-5, and one course in English.
9:20 Daily AND 210 WISE, J. H.

Designed to help teachers of English by (1) a review of the content, both the language and the literature, of secondary school English, with attention to some of the methods widely used in high school English courses, and (2) a study of both the ultimate and the immediate objectives of the secondary English program.

EH. 491.—Children's Literature. 3 credits. Prerequisite: C-3 and C-5.
8:10 Daily AND 210 BOONE, L. P.

A course designed to arouse and satisfy a genuine interest in children's books apart from school textbooks, to aid the student to obtain a better working knowledge of this literature, and to make him more aware of degrees of excellence in content and form.

EH. 502.—American Literature. 3 credits. The second half of the course EH. 501-502. May be taken for credit without EH. 501. Prerequisite: C-3, C-5, and one course in English.
10:30 Daily AND 212 BIGELOW, G. E.

Covers the period from 1865 to the present.

EH. 509.—Chaucer. 3 credits. Prerequisite: C-3, C-5, and one course in English.
9:20 Daily AND 204 PYLES, T.

Reading and critical study of the Canterbury Tales.

EH. 600.—Bibliography and Methods of Research. No credit.
2:00-4:10 T Th LIB 404 BOWERS, R. H.

EH. 630.—Individual Work. 3 credits. Prerequisite: 12 hours of English and approval of department head.
To arrange ROBERTSON, C. A.

Designed for graduate students needing work in subjects not available in currently offered courses. With change of content EH. 630 may be repeated for credit.

EH. 634.—English Literature of the 18th Century. 3 credits.
To arrange LIB 404 CONGLETON, J. E.
The Age of Johnson.

EH. 653.—English Literature of the Victorian Period. 3 credits.
12:50 Daily LIB 404 RUFF, W.
The earlier Victorian writers.

EH. 699.—Research and Thesis. 0 to 6 credits.*

EH. 763.—Seminar in English Renaissance Literature. 3 credits.
To arrange LIB 404 ORAS, A.

EH. 783.—Seminar in American Prose. 3 credits.
To arrange LIB 404 WARFEL, H. R.
General areas from which subjects will be chosen: American biography, essay and history; American criticism; American fiction.

EH. 799.—Research and Dissertation. 1 to 6 credits.*

ENTOMOLOGY

EY. 203.—Economic Entomology. 3 credits.
8:10 M T W Th FLO 308 HETRICK, L. A.
Laboratory: 12:50 to 3:00 M. FLO 306
An introduction to economic entomology, which is based upon a study of the life histories, and control of major insect enemies of American agricultural crops. Particular stress is placed upon southern and Florida economic insects. This course is designed for all students in the College of Agriculture either as a pre- or corequisite for other entomology courses.
Textbook, "Destructive and Useful Insects" by Metcalf, Flint and Metcalf.

EY. 460.—Insect Identification. 3 credits. Prerequisite or corequisite: EY. 203, or EY. 307, and EY. 408.
10:30 M W FLO 308 HETRICK, L. A.
Laboratory: 12:50 to 3:00 T Th FLO 306
A survey of immatures and adults of all orders. Identification of insects of all major families.
Textbooks, "Introduction to Entomology" by Comstock and "How to Know the Immature Insects" by Chu.

GRADUATE COURSES

EY. 699.—Research and Thesis. 0 to 6 credits.*
To be arranged.
Field or laboratory research of entomology problems. Results to be used in preparation of thesis.

FORESTRY

FY. 220.—Introduction to Forestry. 2 credits.
10:30 M T W Th K 111 GELTZ, C. G.
A basic course concerned with the phases of forestry and the history and policy pertinent to the present day forestry situation. Offered primarily for students other than forestry majors.

FY. 221.—Summer Camp. 5 credits.
Field.
Summer camp covers the entire field of forestry. Students receive field instruction in surveying, cruising, silviculture, and forest management.

FY. 228.—Forest Mensuration. 3 credits.
Field HERNDON, T. G.

Note: This course will be given in conjunction with FY. 221.

*Credit assigned must be shown on course assignment card.

FY. 431.—Forest Problems Seminar. Variable Credit.*
To arrange STAFF
Supervised study and investigations in some particular phase of forestry or wildlife management.

FY. 602.—Research Problems in Silviculture. 3 to 6 credits.*
To arrange
Individual research on a specific problem in silvics, forest tree seed, forest tree propagation, forest soils, forest ecology, and silvicultural practices.

FY. 603.—Research Problems in Wood Utilization. 3 to 6 credits.*
To arrange.
Individual research in wood technology, wood preservation, naval stores, small sawmill operation.

FY. 604.—Research problems in Forest Economics and Management. 3 to 6 credits.*
To arrange.
Individual research in forest economics, forest finance, or forest management.

FY. 605.—Research Methods in Wildlife Management. 3 credits.
To arrange. BECKWITH, S. L.
A detailed study of field and laboratory procedures used in wildlife research.

FY. 606.—Research Problems in Wildlife Management. 3 to 6 credits.*
To arrange BECKWITH, S. L.
Individual problems in the field of wildlife management.

FY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange.

FRENCH

FH. 133.—First-Year French. 3 credits.
Lecture: 7:00 M. T. W. Th. AND 4
Laboratory: 10:30 Daily AND 11

FH. 134.—First-Year French. 3 credits. Prerequisite: FH. 133 or the equivalent.
Lecture: 10:30 M T W Th AND 4
Laboratory: 11:40 Daily AND 11

FH. 201.—Second-Year French. 3 credits. Prerequisite: FH. 134 or the equivalent.
Lecture: 7:00 M T W Th AND 7
Laboratory: 10:30 Daily AND 11

FH. 202.—Second-Year French. 3 credits. Prerequisite: FH. 201 or the equivalent.
Lecture: 10:30 M T W Th AND 7
Laboratory: 11:40 Daily AND 11

FH. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college French or the equivalent and permission of the department head.
To arrange AND 3-C STAFF

GRADUATE COURSES

FH. 630.—Individual Work. 3 credits.
To arrange AND 3-C STAFF

FH. 699.—Research and Thesis. 0 to 6 credits.*
To arrange AND 3-C STAFF

*Credit assigned must be shown on course assignment card.

GENERAL SCIENCE

GL. 301.—Elementary School Science. 3 credits.
8:10 Daily YON 150 GLENN, E. R.

The role of science in the development of elementary school children. Experience with the content, materials, and approaches of elementary school science.

GL. 302.—Elementary School Science. 3 credits.
9:20 Daily YON 150 PILTZ, A.

Continuation of GL. 301.

GEOGRAPHY

GPY. 200.—Introduction to Geography. 3 credits.
8:10 Daily B 114 PIERSON, WM. H.

A study of the relationships between population, human activities and the physical world.

GPY. 430.—Individual Work. 3 credits. For undergraduates only.
To arrange

Qualified students and the instructor concerned may choose a particular topic or problem for study. GPY. 430 may be repeated for full credit with change of content.

GPY. 481.—Geography of the United States and Canada. 3 credits. Prerequisite: GPY. 200.
7:00 Daily B 114

A survey of the continent north from the Rio Grande with special reference to the natural resources of the United States. The analysis of the major regions of the United States and Canada.

GPY. 486.—Geography of Caribbean America. 3 credits. Prerequisite: GPY. 200.
10:30 Daily B 114 PIERSON, WM. H.

An economic geography course covering the West Indies, Mexico, Central America, Colombia, and Venezuela. The commercial importance of each republic and island as a market for American goods and as a source of raw materials and foodstuffs; Florida's commercial position in such trade.

GPY. 595.—Travel Field Course. 6 credits. Prerequisite: GPY. 490 (or GPY. 600 or appropriate area course).
Field GILDEA, R. Y., JR.

A travel course employing methods of geographic field work. One week on the campus orientation, six weeks in the field along the west coast of the Gulf of Mexico and in the Republic of Mexico, last week report writing on campus. Available for graduate major credit.

GPY. 630.—Individual Work. 3 credits.
To arrange

A reading or research course in such areas of Geography as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

GPY. 683.—Seminar in Geographic Research. 3 credits. Prerequisite: Graduate status with a major or minor in geography.
To arrange DIETTRICH, S. deR.

Discussion, application and critical evaluation of methods of geographic research.

GPY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

GPY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

For students who are working on the doctor's degree in the area of Latin American Studies.

GEOLOGY

GY. 203.—Elements of Physical Geology. 3 credits.
9:20 M T W Th B 102 RAPPENECKER, C.
Laboratory: 2:00 to 4:10 T Th B 102

A study of minerals and rocks and their formation, geological processes, land forms and their interpretation, and the applications of geological knowledge to human affairs.

*Credit assigned must be shown on course assignment card.

GY. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of Geology and permission of Head of Department.
To arrange B 104 EDWARDS, R. A.
For work in addition to that offered in the regular courses in physiography, mineralogy, petrology and paleontology.

GERMAN

GN. 133.—First-Year German. 3 credits.
Lecture: 7:00 M T W Th AND 6 CRAPS, J. E.
Laboratory: 11:40 Daily AND 11

GN. 134.—First-Year German. 3 credits. Prerequisite: GN. 133 or the equivalent.
Lecture: 10:30 M T W Th AND 6 VALK, M. E.
Laboratory: 11:40 Daily AND 11

GN. 201.—Second-Year German. 3 credits. Prerequisite: GN. 134 or the equivalent.
Lecture: 7:00 M T W Th AND 18 VALK, M. E.
Laboratory: 11:40 Daily AND 11

GN. 202.—Second-Year German. 3 credits. Prerequisite: GN. 201 or the equivalent.
Lecture: 10:30 M T W Th AND 18 JONES, O. F.
Laboratory: 11:40 Daily AND 11

GN. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college German or the equivalent and the permission of the department head.
To arrange AND 3-C

GRADUATE COURSES

GN. 630.—Individual Work. 3 credits.
To arrange AND 3-C

GN. 699.—Research and Thesis. 0 to 6 credits.*
To arrange AND 3-C

GREEK

GK. 530.—Individual Work. 3 credits. Prerequisite: 12 hours of college Greek or the equivalent and permission of the head of the department.
To arrange D 116 ARATOWSKY, B.

HISTORY

HY. 151.—Florida History to 1860. 3 credits.
8:10 Daily PEA 112 PROCTOR, S.
The Spanish discovery of, exploration in, and expansion from the Caribbean Islands; Spain in Southeastern North America; the imperial conflict for Florida; the British period; the Second Spanish period; the United States acquisition of the Floridas; the territorial period and the period of early statehood.

HY. 201.—History of World Civilizations. 3 credits.
8:10 Daily PEA 114 PAYNE, A. N.
Prehistoric Man, the Oriental, Classical, Islamic and Byzantine Civilizations and the Western traditions through the Middle Ages, the Renaissance and the Reformation. Emphasis is placed on the political, economic, social, religious and cultural developments.

*Credit assigned must be shown on course assignment card.

HY. 245.—United States History to 1865. 3 credits.
9:20 Daily PEA 112 BARINGER, W. E.

A survey of the political, economic, social and intellectual development of the people of the United States from the founding of Britain's colonies in North America through the American Civil War.

HY. 335.—English History to 1689. 3 credits.
9:20 Daily PEA 114 PAYNE, A. N.

A survey of English History from early times to the Glorious Revolution, with emphasis on Medieval England, the rise of the state, the Tudor and Stuart periods and the economic and political developments.

HY. 372.—Modern Latin-American History. 3 credits.
10:30 Daily PEA 114 McALISTER, L. N.

A survey of Latin America from the Wars of Independence to the present, with particular attention to the fundamental political, economic, and cultural factors and to the increasing importance of Latin America in world affairs.

HY. 549.—Civil War and Reconstruction. 3 credits.
10:30 Daily PEA 112 BARINGER, W. E.

The causes, course and results of the sectional struggle in the United States; the economic and social significance of Civil War and Reconstruction in the nation.

HY. 551.—The Old South. 3 credits.
11:40 Daily PEA 112 OSBORN, G. C.

The South to the close of the Civil War; the impact of climate, soil and the plantation system upon Southern social, economic and political life, thought and actions; the sectional clash between North and South; the Civil War in the South.

HY. 599.—Special Study in History. 3 credits.
To arrange

Tutorial or pro-seminar study in various periods or topics within the areas of United States, Latin-American, European (including both Western Europe and Slavic Europe) and Asiatic history.

HY. 630.—Individual Work. 3 credits.
To arrange

A reading or research course in such areas of History as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

HY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

HY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

HORTICULTURE

HE. 403.—Physiology of Fruit Production. 3 credits. Prerequisites: BTY. 211, HE. 201.
7:00 Daily FLO 209 STOUT, G. J.

Physiological principles underlying the production of fruit crops. Textbook: Gardner, Bradford and Hooker, Fundamentals of Fruit Production.

GRADUATE COURSES

HE. 670.—Non-thesis Research in Horticulture. 1 to 6 credits.
To arrange STOUT, G. J.

HE. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange STOUT, G. J.

*Credit assigned must be shown on course assignment card.

INDUSTRIAL ARTS EDUCATION

IN. 102.—Elementary Woodwork. 3 credits.
7:00-9:10 Daily YON 20 MASSEY, H.

Projects, shop sketching, wood finishing, common tool techniques in hand woodworking, and related information.

IN. 303.—Machine Woodwork. 3 credits.
9:20-11:30 Daily YON 20 MASSEY, H.

Power machinery and machine maintenance, and use of the jointer, tilting arbor saw, band saw, lathe, mortiser, drill press, router, shaper, and other machines.

IN. 312.—Elementary Handcrafts. 3 credits.
2:00-4:10 Daily YON 304 B STAFF

Creation of simple projects in such media as leather, textiles, clay, reed, plastics, linoleum block, metal, wood, and native material.

IN 416.—Handcrafts Problems. 3 credits.
11:40-1:50 Daily YON 304 B SHACKELFORD, R. W.

Specialization in one or two craft areas, emphasizing original design and skill.

IN. 422.—Machine Shop Practice. 3 credits.
7:00-9:10 Daily YON 22 SHACKELFORD, R. W.

Use of precision instruments and cutting tools, drill press, grinding machine, lathe, milling machine, and shaper.

GRADUATE COURSES

IN. 630.—Individual Work. (Formerly EN. 530). 3 credits.
To arrange STRICKLAND, T. W.

Problems approved by the instructor.

IN. 633.—Industrial Arts and Vocational Laboratory Seminar. (Formerly IN. 533). 3 credits.
10:30 Daily YON 302 NEUBAUER, G. W.

Advanced laboratory techniques and opportunity for in-service graduate students to exchange experiences.

IN. 635.—Curriculum Symposium in Industrial Education (Formerly IN. 535) 3 credits.
9:20 Daily YON 302 STRICKLAND, T. W.

A staff symposium concerning the industrial curriculum, a review of the current situation and research of a projective nature.

IN. 653.—Industrial-Technical Resources. (Formerly IN. 553). 3 credits.
11:40 Daily YON 302 NEUBAUER, G. W.

A study of resources through visitation, observation, evaluation, and report.

INDUSTRIAL ENGINEERING

IG. 371.—Job Analysis and Evaluation. 2 credits. Prerequisite: Upper Division classification.
9:20 M T W Th ENG 343

Analysis of the mental and physical requirements, responsibilities and working conditions of jobs and the several systems of determining the relative worth of jobs. Wage determination. Job evaluation plan installation and maintenance. Merit rating.

IG. 460.—Engineering Economy. 3 credits. Prerequisite: Engineering classification.
10:30 Daily ENG 312

The economic aspect of technical projects; the importance of alternative solutions being selected through economy, intangible and financial analysis stressed. "Will it pay?" and "Can it be financed?" Questions are analyzed from the engineering and management viewpoint. Lectures, discussions, and the solution of problems.

IG. 463.—Specifications, Contracts, Ethics and Industrial Safety. 3 credits. Prerequisite: Engineering classification.

8:10 Daily ENG 312

Specifications writing for materials and construction of engineering projects; advertising and letting of contracts, agreements and contractual relations. Engineering ethics. Organization of safety work in industry; accident causes and legal responsibility of employer and employee.

IG. 472.—Human Engineering. 2 credits. Prerequisite: Engineering classification.

10:30 M T W Th ENG 343

Human nature in engineering and management. Consideration of the human element in the design of equipment and processes, as well as human reactions to plant situations.

GRADUATE COURSES

IG. 699.—Research and Thesis. 0 to 6 credits.*

INTERIOR DESIGN*

IR. 201.—Home Decoration I. 3 credits.

8:10-10:20 M W F E 174.

5 hours to arrange.

Elements and principles of interior design as applied to the home. A study of interior space and furnishings, and a consideration of basic factors such as scale, form, color, and arrangement.

IR. 202.—Home Decoration II. 3 credits. Prerequisite: IR. 201.

8:10-11:30 T Th E 174

5 hours to arrange.

Problems in the application of fundamental principles to the interior design and decoration of the home. Solutions presented in the form of plan and model arrangements, schematic drawings, color and texture collages, and idea sketches.

IR. 301-302-303-304.—Projects in Interior Design, Group I. 3 credits each; group total, 12 credits. Maximum Summer Session load: 9 credits. Prerequisite: Completion of Lower Division program in Interior Design or equivalent. This series constitutes the beginning work in the Upper Division professional curriculum.

To arrange. E 174

A study of the problems involved in the design, construction, and execution of a variety of types of room interiors.

IR. 311-312-313-314.—Projects in Interior Design, Group 2. 3 credits each; group total, 12 credits. Maximum Summer Session load: 9 credits. This series of courses is a continuation of the work of the series IR. 301-302-303-304.

To arrange. E 174

A study of the problems involved in the design, construction, and execution of more complex types of room interiors and suites.

IR. 401-402-403-404.—Projects in Interior Design, Group 3. 3 credits each; group total, 12 credits. Maximum Summer Session load: 9 credits. This series of courses is a continuation of the series IR. 311-312-313-314.

To arrange. E 174

A study of the problems involved in the design, construction, and execution of commercial and institutional interiors of a special nature or magnitude.

IR. 411-412-413-414.—Projects in Interior Design, Group 4. 3 credits each, group total, 12 credits. Maximum Summer Session load: 9 credits. This series of courses is a continuation of the series IR. 401-402-403-404.

To arrange. E 174

A study of the problems involved in the design, construction, and execution of the monuments and the interior of special nature or magnitude.

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*Credit assigned must be shown on course assignment card.

*For detailed course description refer to the University Catalog.

JOURNALISM

JM. 325.—Contemporary Affairs. 2 credits.
12:50 M T W Th K 203 WEAVER, J. C.

Lectures and discussions of major news developments and their background; current political, economic, social, and scientific developments. Aims to give the student an understanding of world and domestic problems.

JM. 509.—Law of Press and Radio-TV. 3 credits.
11:40 Daily K 203

How to avoid legal difficulties in journalistic activities, with special attention to provisions of Florida law relating to journalism and radio-TV.

JM. 515.—Journalism in Secondary Schools. 3 credits. Prerequisite: Senior standing or permission of the instructor.
2:00 Daily K 103

This course is designed for persons who have been teaching journalism in secondary schools, or who act as faculty advisers for school newspapers, magazines, or yearbooks. It includes a general survey of the editorial, business, publishing and mechanical phases of school publications with emphasis on those aspects which are of particular value to teachers.

JM. 699.—Research and Thesis. 0 to 6 credits.*
Hours to be arranged

LATIN

LN. 105.—The Latin Element in English. 2 credits.
9:20 M T W Th AND 18 ARATOWSKY, B.

LN. 430.—Individual Work. 3 credits. Prerequisite: 18 hours of college Latin or the equivalent, and permission of the department head.
To arrange D 116 ARATOWSKY, B.

GRADUATE COURSE

LN. 630.—Individual Work. 3 credits.
To arrange D 116 ARATOWSKY, B.

LAW

LW. 402.—Contracts II. 2 credits.
9:20 M T Th F LAW 201 MAUTZ, R. B.

The effect of various types of non-performance on the rights and duties of the parties to a business agreement; assignability of contracts; rights of third-party beneficiaries.

LW. 404.—Criminal Law and Procedure II. 2 credits.
11:40 M T Th F LAW 201 CLARK, V. W.

A continuation of LW. 403. Also defenses in criminal prosecutions; Federal Rules of Criminal Procedure and their construction.

LW. 412.—Torts II. 3 credits.
8:10 Daily LAW 104 MALONEY, F. E.

Negligence: early developments, standard of care, duty to act, functions of judge and jury, res-ipsa loquitur, proximate cause, defenses, measure of damages; nuisance; liability of owners and occupiers of land; relationship of tort and contract liability; misrepresentation; malicious prosecution and abuse of process; interference with advantageous relations.

LW. 505.—State and Local Taxation. 2 credits.
8:10 M T Th F LAW 201 CLARK, V. W.

Nature and purposes of federal and state taxation; comparison of property and excise taxes; tax jurisdiction; assessment procedures; methods of collecting taxes; remedies of taxpayers for illegal taxation.

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*Credit assigned must be shown on course assignment card.

LW. 506.—Estate and Gift Taxation. 2 credits.

8:10 M T Th F LAW 203 BLACK, K. L.

Elements of federal tax procedure; fundamentals of federal estate and gift taxation; techniques of federal tax research.

LW. 507.—Pleading and Jurisdiction. 4 credits.

9:20 Daily, 11:40 W F LAW 203 YONGE, P. K.

Formerly "Procedure II." History of Florida and Federal procedural law; joinder and splitting of causes of action; counterclaims; venue; in personam and in rem jurisdiction; real parties in interest; joinder of parties; interpleader; intervention; class suits; commencement of action; pleadings and motions.

LW. 508.—Evidence. 4 credits.

9:20 Daily, 10:30 W F LAW 104 TeSELLE, C. J.

Witnesses, including competency, privilege, examination, impeachment and rehabilitation; character evidence; hearsay and the exceptions to its exclusion; opinion; real evidence; proof of execution of writings; the "best-evidence" rule; judicial notice; presumptions; burden of proof.

LW. 510.—Fiduciary Administration I. 2 credits.

11:40 M T W Th LAW 104 MACDONALD, W. D.

Administration of decedents' estates and non-commercial trusts; steps in the administration of a decedent's estate, whether testate or intestate; powers of the executor, the administrator, and the trustee.

LW. 572.—Domestic Relations. 2 credits.

2:00 M T W Th LAW 104 KRASTIN, K.

Nature of contract to marry and of marriage; requisites for validity; annulment doctrines; divorce: causes, grounds, defenses, jurisdiction; economic and tort relations between spouses and parent and child.

LW. 574.—Advanced Equity. 2 credits.

3:10 M T W Th LAW 201 MALONEY, F. E.

Specific performance: nature of jurisdiction, the statute of frauds, part performance; rescission and reformation; equitable relief against unjust situations at law, including interpleader, accounting, bills quia timet, bills of peace, and class suits.

LW. 612.—Legal Ethics. 1 credit.

8:00-10:00 p.m. T MAUTZ, R. B.

Responsibilities of the legal profession; Canons of Ethics of the American Bar Association; organization of the bar; current problems and activities of the legal profession.

LW. 631.—Insurance. 2 credits.

2:00 M T W Th LAW 201 BLACK, K. L.

Historical background; construction of contracts; the modern insurance code; insurance practice and litigation; employee benefit plans; business insurance.

LW. 665.—Municipal Corporations. 2 credits.

10:30 M T W Th LAW 201 KRASTIN, K.

Legal problems encountered in the conduct of government at the local level, principally municipal; types and nature of local units, their place in the governmental structure, their organization, personnel, powers, procedure, means of financing, and limitations; community planning.

LW. 667.—Trade Regulations. 2 credits.

11:40 M T Th F LAW 304 HUNTER, W. A.

Common law and statutory regulation of trade and industry; the restraint of trade and anti-trust laws.

LW. 668.—Unfair Trade Practices. 2 credits.

8:10 M T Th F LAW 304 HUNTER, W. A.

Unfair business practices at common law and under state and federal statutes; trade marks and trade names; false advertising; price discrimination; miscellaneous business torts.

LW. 669.—International Law. 2 credits.

10:30 M T W Th LAW 203 CARTER, P. B.

Principles of international law as applied in international adjudication and arbitration and in American courts. Includes selected problems dealing with the sources, authority and application of international law; recognition; territory; nationality; jurisdiction; treaties; extradition; the United Nations and other international organizations.

LW. 679.—Restitution. 2 credits.
9:20 M T W Th LAW 304 MACDONALD, W. D.

Restitutionary remedies at law and in equity, including quasi contract, equitable accounting, subrogation, constructive trust, and equitable lien; choice of remedies; restitution for benefits conferred through mistake, fraud, duress, or under contracts that are substantially unperformed, impossible to perform, or illegal.

LW. 690.—Law Review. 1 credit.
To arrange MAUTZ, R. B.

Research, writing and editorial work in connection with the publication of University of Florida Law Review. Limited to students who have completed LW. 408 (or qualified transfer students) and whose average in all law courses attempted is at least 2.0 at each time law review work is undertaken.

LW. 692.—Seminar in Legal Philosophy. 1 credit.
8:00-10:00 p.m. M LAW 104 CARTER, P. B.

The interrelation of justice and law; views of great philosophers on law as one aspect of their philosophical systems; schools of legal thought; methodology of the judiciary; analysis of assumptions made in formulating familiar doctrines in the law. Each student leads a discussion and submits an original essay. Preference given sixth-semester students when enrollment exceeds seminar size; fifth-semester students should check with instructor before enrolling.

LIBRARY SCIENCE

LY. 301.—Introduction to Library Materials. 3 credits.
9:20 Daily LIB 454 PEARCE, M. W.

Principles and methods of evaluating and selecting books and other library materials and their use for reference and instructional purposes.

LY. 302.—Basic Reference Materials. 3 credits. Prerequisite: LY. 301.
11:40 Daily LIB 454 PEARCE, M. W.

A study of the basic types of reference materials—encyclopedias, dictionaries, yearbooks, periodical indexes, bibliographies—with practice in the use of these materials toward a better understanding of basic research procedures.

LY. 304.—Organization of Library Materials. 3 credits.
8:10 Daily LIB 454 REYNOLDS, M. M.

Classroom and laboratory practice in the basic procedures of acquisition, preparation, and processing of materials for library service in relation to the school and other agencies which the library serves.

MATHEMATICS

MS. 105.—Basic Mathematics. 4 credits. Prerequisite: C-42, except for the superior group in mathematics.
(Register for one section only.)
Section 1 8:10 Daily and 2:00 M W PEA 4
Section 2 10.30 Daily and 2:00 T Th PEA 4

In place of the traditional college algebra, trigonometry, and analytic geometry in succession, this course offers a sequence of topics including much of the above and some calculus. Thus the student will obtain early a working knowledge of such mathematics as is basic to the study of the sciences and other subjects. The choice of material is so made as to present mathematics as an integrated whole rather than as a series of segregated topics.

MS. 106.—Basic Mathematics. 4 credits. The second half of the course MS. 105-106.
(Register for one section only.)
Section 1 7:00 Daily and 2:00 M W WAL 202
Section 2 8:10 Daily and 2:00 T Th WAL 304
Section 3 9:20 Daily and 2:00 T Th WAL 209

MS. 208.—Business Mathematics. 3 credits. Prerequisite: C-42, except for the superior group in mathematics. Not open to students who have had MS. 308,

and not counted toward a mathematics major in the College of Arts and Sciences.

7:00 Daily WAL 304

Arithmetical, and some algebraic. treatment of the mathematical problems involved in business. Simple interest. Simple, bank, and trade discounts. Promissory notes, drafts, compound interest and related problems, partial payment, annuities, amortization, and other topics of the mathematics of business are treated.

MS. 225.—Arithmetic for Teachers. 3 credits. Prerequisite: C-42. Not open to students who have completed more than two sementers of college mathematics, and not counted toward a mathematics major in the College of Arts and Sciences.

10:30 Daily WAL 213

Treatment of fundamental notions of arithmetic, with certain advanced ideas designed to throw light upon the beginning processes. Intended not only for teachers of arithmetic but also for teachers of other subjects in which familiarity with number processes is desirable.

MS. 226.—Algebra for Teachers. 3 credits. Prerequisite: C-42 or its equivalent. Not counted toward a mathematics major in the College of Arts and Sciences.

10:30 Daily WAL 307

A thorough review of high school algebra, with some elementary treatment of the theory of equations.

MS. 308.—Mathematics of Finance. 3 credits. Prerequisite: One year of college mathematics.

12:50 Daily WAL 207

An algebraic treatment of practical financial problems. Compound interest, annuities, bonds and contracts, depreciation and depletion, sinking funds and amortization of debts, and life insurance mathematics are studied. Somewhat more advanced and more theoretical than MS. 208, but not open for credit to students who have credit in MS. 208.

MS. 310.—Statistical Methods. 3 credits. Prerequisite: MS. 106 or its equivalent.

9:20 Daily WAL 213

Presents the bases of the various procedures as well as practical computational methods. The statistics of frequency distributions; moments; normal curve; curve fitting; regression and correlation analysis. Introduction to Chi-square, Student's t, and the F distributions.

MS. 311.—Advanced College Algebra. 3 credits. Prerequisite: MS. 106, or its equivalent.

11:40 Daily WAL 213

Further treatment of such topics as progressions, theory of quadratic equations, permutations, combinations, probability, induction, binomial theorem, series, undetermined coefficients.

MS. 325.—Advanced General Mathematics. 3 credits. Prerequisite: C-42.

9:20 Daily WAL 102

Continuation of the arithmetic and algebraic topics of elementary general mathematics with new material added. The deeper meaning of laws underlying number operations. Some properties of positive whole numbers. Higher functional analysis. Valuable to prospective teachers of mathematics and others who wish to continue some mathematical work without becoming specialists in pure mathematics.

MS. 326.—Advanced General Mathematics. 3 credits. Prerequisite: C-42.

7:00 Daily WAL 102

The facts and processes of elementary Euclidean geometry, with the study of numerous generalizations of theorems and the manner in which geometry, algebra, trigonometry and analytic geometry are related. The nature of proof. Types of proof. Problems in geometric constructions. Inequalities. The locus idea treated both synthetically and analytically. Valuable to prospective teachers and to other students majoring in mathematics.

MS. 327.—Advanced General Mathematics. 3 credits. Prerequisite: MS. 325.

10:30 Daily WAL 102

The general processes pursued in MS. 325 are continued, with special emphasis on analysis. The analytic treatment is applied extensively to algebraic, exponential, logarithmic, geometric, and trigonometric functions. The informal notions of the derivative and integral introduced in MS. 325 are applied throughout the course and extended as needed. Mathematics is presented throughout as a single whole, both in its effect on the material side of civilization and as a creative force in its own right. The sequence C-42, MS. 325, and MS. 327 constitutes a cultural approach to formal courses in the calculus.

MS. 353.—Differential Calculus. 4 credits. Prerequisite: MS. 106 or 327. Not open for credit to students who have taken credit for MS. 343.

(Register for one section only.)

Section 1 9:20 Daily and 2:00 M W WAL 211

Section 2 11:40 Daily and 2:00 T Th WAL 202

Differentiation and integration. Typical problems solved by these methods are calculation of rates of change, computation of areas, volumes, moments of inertia, energy, power, and many others. Various advanced topics of special value to engineers and scientists. Open to University College students.

MS. 354.—Integral Calculus. 4 credits. The second half of the course MS. 353-354. Prerequisite: MS. 353 or its equivalent.

(Register for one section only.)

Section 1 8:10 Daily and 2:00 M W WAL 209

Section 2 10:30 Daily and 2:00 T Th WAL 211

MS. 405.—Theory of Equations. 3 credits. Prerequisite: MS. 106 or 327.

7:00 Daily WAL 213

Theorems and methods of solution of equations of higher degree. Various methods of approximating solutions of numerical equations. Determinants; systems of linear equations. Symmetric functions. Elimination, resultants, and discriminants.

MS. 420.—Differential Equations. 3 credits. Prerequisite: MS. 354.

11:40 Daily WAL 209

The classification, solution and application of various equations which contain expressions involving not only variables, but also the derivatives of these variables. Not open for credit to students who have taken MS. 421.

MS. 430.—Individual Work. 3 credits. Prerequisite: MS. 354 and permission of Head of Department.

To arrange

For undergraduate work needed by the student and not obtainable in the regular course offerings.

MS. 431.—College Geometry. 3 credits. Prerequisite: MS. 326 or its equivalent.

8:10 Daily WAL 211

The use of elementary methods in the advanced study of the triangle and circle. Special emphasis on solving original exercises. Valuable to prospective high school and college geometry teachers.

GRADUATE COURSES

MS. 501.—Introduction to Mathematical Thought. 3 credits.

12:50 Daily WAL 211

Examination of the anotomy of mathematics. The axiomatic method. Theory of Sets. Transfinite arithmetic. The linear continuum and the real number system. Groups and their significance for the foundations. Generalizations of classical mathematics. Mathematical philosophies.

MS. 523.—Higher Mathematics for Engineers and Physicists. 3 credits. Prerequisite: MS. 522. The last third of MS. 521-522-523.

8:10 Daily WAL 301

Ordinary differential equations with emphasis on numerical methods and series solutions; the Laplace transform; boundary value problems; orthogonal functions. The methods of vector analysis and special topics of partial differential equations, and the functions of a complex variable with applications.

MS. 551.—Advanced Topics in Calculus. 3 credits.

10:30 Daily WAL 301

Topics of advanced nature selected from the calculus, including partial differentiation, Taylor's theorem, infinite series, continuation of simple multiple integrals, line and surface integrals, and Green's theorem.

MS. 552.—Advanced Topics in Calculus. 3 credits. The second half of the course MS. 551-552.

10:30 Daily WAL 209

MS. 602.—Vector Analysis. 3 credits.
7:00 Daily WAL 207

The algebra and calculus of vectors in two and three dimensions. Applications to problems in physics and engineering.

MS. 607.—Tensor Analysis. 3 credits.
9:20 Daily WAL 308

A study of transformations of coordinates, matrices, and tensors. The calculus of tensors. Special attention to the applications of tensors in differential geometry, differential equations, problems from physics, and n-dimensional Euclidean, Riemannian, and other spaces.

MS. 624.—Synthetic Projective Geometry. 3 credits.
9:20 Daily WAL 207

Pure geometry, dealing primarily with properties unaltered by the process of projection and section; principal theorems involved; theory of poles and polars; ruled surfaces of second order; the theory of involution.

MS. 630.—Individual Work. 3 credits.
To arrange

Under this number, work as needed may be taken by advanced students to complete their master's or doctoral programs.

MS. 636.—Foundations of Geometry. 3 credits.
8:10 Daily WAL 102

An investigation of the assumptions of geometry; the parallel postulate; steps leading to non-Euclidean geometries; consequent development of modern branches of the subject; elements of non-Euclidean geometry, trigonometry, and calculus.

MS. 640.—Fourier Series. 3 credits.
11:40 Daily WAL 102

The application of trigonometric series to the solution of boundary-value problems of mathematical physics. Solutions are obtained to partial differential equations relating to the flow of heat, conduction of electricity and vibrating strings.

MS. 655.—Functions of a Complex Variable. 3 credits.
10:30 Daily WAL 202

Fundamental operations with complex numbers; differentiation and integration theorems; mapping; transformations; series.

MS. 668.—History of Elementary Mathematics. 3 credits.
10:30 Daily WAL 207

A survey of the development of mathematics through the calculus, with special emphasis on the changes of the processes of operation and methods of teaching. No specific textbook is followed, but a number of works are used as reference.

MS. 699.—Research and Thesis. 0 to 6 credits.*
To be arranged

MS. 743.—Differential Geometry. 3 credits.
7:00 Daily WAL 301

An introduction to the local study of so-called Riemannian and non-Riemannian spaces.

MS. 753.—Calculus of Variations. 3 credits.
12:50 Daily WAL 301

Introductory theory and application of the calculus of variation. The problem of the shortest arc, quickest descent, minimum surface and the least area enclosed by a curve of given length are treated. Applications using Hamilton's Principle and Lagrange's equations.

MS. 799.—Research and Dissertation. 1 to 6 credits.*
To be arranged

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*Credit assigned must be shown on course assignment card.

MECHANICAL ENGINEERING

ML. 181.—Engineering Drawing. 3 credits. Corequisite: MS. 105.
7:00 to 9:10 Daily and 1 two-hour period to arrange ENG 514

How to make and how to read engineering drawings.

ML. 182.—Descriptive Geometry. 3 credits. Prerequisites: ML. 181, MS. 105.
7:00 to 9:10 Daily and 1 two-hour period to arrange ENG 500

Graphical representation of basic geometrical elements and the solution of related space problems.

ML. 282.—Mechanisms and Kinematics. 3 credits. Prerequisite: ML. 182. Corequisite: PS. 205.
8:10 M T W Th ENG 512
Laboratory 12:50 to 4:10 T Th ENG 518

Revolving and oscillating bodies, link work, belts, pulleys, gears, and cams; trains of mechanisms and the velocities of moving parts.

ML. 385.—Thermodynamics I. 3 credits. Prerequisites: MS. 354, PS. 206, CY. 218.
8:10 Daily ENG 521

Energy equations and availability of energy; gases, vapors, and mixtures; engineering applications in flow of fluids, vapor power cycles.

ML. 387.—Mechanical Laboratory I. 1 credit. Corequisite: ML. 385.
12:50 to 5:20 M W WAL 103

The preparation of engineering reports, computation aids, the measurement of area, time, speed, pressure, temperature and gas flow.

ML. 482.—Refrigeration and Air Conditioning. 3 credits. Prerequisite: ML. 390.
8:10 Daily ENG 436

Refrigerating and air conditioning apparatus and their applications to the industrial, commercial and residential fields.

ML. 484.—Refrigeration and Air Conditioning Laboratory. 1 credit. Prerequisite: ML. 387. Corequisite: ML. 482.
12:50 to 5:20 M W WAL 103

Tests of refrigeration and air conditioning machinery.

ML. 486.—Power Engineering. 3 credits. Prerequisites: ML. 390, EM 313.
9:20 Daily ENG 512

Steam and Diesel engine power plants and their auxiliary equipment.

ML. 488.—Mechanical Laboratory II. 1 credit. Prerequisite: ML. 387. Corequisite: ML. 486.
12:50 to 5:20 T Th WAL 103

Analysis of fuels, heating value, flue gas analysis, and testing of boilers, turbines, engines and steam plant auxiliary apparatus.

ML. 489.—Manufacturing Operations I. 3 credits. Prerequisite: EM. 366. Corequisite: EM. 367.
10:30 M T W Th WAL 512
Laboratory 12:50 to 4:10 T Th F 103

Machinery, materials and processes used in manufacturing.

GRADUATE COURSES

ML. 699.—Research and Thesis. 0 to 6 credits.*

*Credit assigned must be shown on course assignment card.

MUSIC

***MSC. 21.—Piano. 1 credit.**
Lawrenson, R. E.

***MSC. 25.—Voice. 1 credit.**
LUPKIEWICZ, J. V., BOATRIGHT, C. A.

***MSC. 27.—Stringed Instruments. 1 credit.**
WIRTALA, A. E.

***MSC. 35.—Woodwind Instruments. 1 credit.**
BOLLES, R. S.

***MSC. 43.—Brass Instruments. 1 credit.**
BACHMAN, H. B.

***MSC. 51.—Percussion Instruments. 1 credit.**
BACHMAN, H. B.

All Applied Music Courses as outlined in the University of Florida General Catalogue will be offered during the Summer Session of 1955.

MSC. 160.—Music Skills. 3 credits.
8:10 Daily R 201 ABELSON, N. E.

Fundamentals of music needed by the classroom teacher for teaching music in the elementary school.

MSC. 161.—Music for the Elementary Child. 3 credits. Prerequisite: MSC. 160 or equivalent.
10:30 Daily R 201 ABELSON, N. E.

MSC. 161 is a state certification requirement for teaching in the elementary schools.
Principles, problems, and procedures relative to the teaching of music by the classroom teacher in the elementary school.

MSC. 170.—University Orchestra. 1 credit.
7:30 p.m. M 4:20 Th R 144 WIRTALA, A. E.

The study and performance of standard orchestra literature.

MSC. 171.—Choral Union. 1 credit.
3:10 Daily R 122 BOATRIGHT, C. A.

Study and performance of large choral works. A mixed chorus.

MSC. 174.—University Band. 1 credit.
4:20 M T W F R 144 BACHMAN, H. B.

The study and performance of standard band literature.

MSC. 210.—Music Appreciation. 2 credits.
2:00 M T Th F R 201 MURPHREE, C. L.

A study, through group listening and discussion, to expand the student's understanding of music literature.

MSC. 360.—Music Education in the Secondary School. 3 credits.
9:20 Daily R 201 PAUL, O. F.

Fundamental principles and procedures of music education in the junior and senior high schools.

MSC. 364.—Projects and Problems in Music Education. 3 credits. May be taken for credit without MSC. 363.
12:50 Daily R 201 PAUL, O. F.

For the advanced student who wishes some help in the problems of teaching music in an individual situation.

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*Students registered for Applied Music will be assigned instructor, time and place of meeting at the registration desk.

MSC. 412.—Survey of Music History. 2 credits.
11:40 M T Th F R 202 LUPKIEWICZ, J. V.
A detailed study of the history of music with emphasis on its relationship to the history of man.

MSC. 460.—Band Materials Laboratory. 3 credits.
8:10 Daily R 144 BACHMAN, H. B.
Study and performance of the repertoire used in school bands.

PHARMACEUTICAL CHEMISTRY

GRADUATE COURSES

PCY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

PCY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

PHARMACOGNOSY

PGY. 222.—Practical Pharmacognosy. 3 credits.
10:30 Daily LEI 432 JOHNSON, C. H.

GRADUATE COURSES

PGY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

PGY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

PHARMACOLOGY

PLY. 301.—Applied Human Anatomy for Pharmacists. 4 credits.
11:40 M T W Th LEI 432 FREYBURGER, S. W.
Lab. 9:20-12:40 F and 2:00-5:20 M W F LEI 314

PLY. 405.—Introductory Pharmacology. 3 credits.
2:00 Daily LEI 432 FOX, L. E.

GRADUATE COURSES

PLY. 630.—Special Problems. 5 credits.
To arrange FOX, L. E.

PLY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

PLY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

PHARMACY

PHY. 106.—Pharmaceutical Calculations. 2 credits.
11:40 M T W Th LEI 324

PHY. 224.—Galenical Pharmacy. 3 credits.
8:10 M T W Th LEI 432
Lab. 2:00-5:20 T Th LEI 306

*Credit assigned must be shown on course assignment card.

PHY. 456.—Pharmaceutical Specialties. 3 credits.
9:20 M T W Th LEI 324 LAUTER, W. M.
Lab. 3:10-5:20 T Th LEI 314

PHY. 462.—Prescriptions and Dispensing. 4 credits.
8:10 M T W Th LEI 324 HUSA, W. J.
Lab. 10:30-12:40 M T W Th LEI 306

GRADUATE COURSES

PHY. 604.—Advanced Galenical Pharmacy. 2 credits.
9:20 M T W Th LEI 402 HUSA, W. J.

PHY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

PHY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

PHILOSOPHY

PPY. 201.—Problems of Philosophy. 3 credits.
8:10 Daily AND 104 OLIVER, J. W.

A consideration of some of the major problems of philosophy—ethics, philosophy of science, theory of knowledge, philosophy of art, philosophy of religion and metaphysics. Selections from the writings of important philosophers, ancient and modern, with emphasis upon the modern, will be read.

PPY. 430.—Individual Work. 3 credits. Prerequisite: 12 hours of philosophy, and permission of the departmental adviser.
To arrange OLIVER, J. W.

Provision will be made for advanced undergraduate students who desire to supplement the regular courses by individual reading or investigation under guidance. Students will be helped to plan a definite program, and will meet a member or members of the departmental staff in frequent conferences. With change of content, PPY. 430 may be elected for full credit in subsequent sessions.

PPY. 630.—Individual Work. 3 credits. Prerequisite: Approval of the departmental adviser.
To arrange OLIVER, J. W.

Provision will be made for graduate students who desire to supplement the regular courses by individual reading or investigation under guidance. Students will be helped to plan a definite program, and will meet a member or members of the departmental staff in frequent conferences. With change of content, PPY. 630 may be elected for full credit in subsequent sessions.

PHYSICAL EDUCATION, HEALTH AND ATHLETICS

PHA. 251.—Folk, Social and Tap Dance. 2 credits.
11:40 Daily FLG 206 TITUS, M.

Basic skills in folk, square, social and tap dancing.

PHA. 282.—Basketball. 2 credits.
9:20 Daily FLG 206 McCACHREN, J.

Skills, rules, coaching methods, offensive and defensive team play in basketball.

PHA. 285.—Individual and Dual Sports for Men. 2 credits.
2:00 Daily FLG 210 BRACKEN, A. and POTTER, W.

Skills, rules, strategies and teaching methods in tennis, handball, golf, and other individual and dual activities.

PHA. 286.—Aquatics for Men. 2 credits.
8:10 Daily FLG 206 LEE, P.

Skills, knowledges and teaching methods in swimming and diving.

*Credit assigned must be shown on course assignment card.

PHA. 287.—Gymnastics for Men. 2 credits.
10:40 Daily FLG 210 STEPHENS, F.

Skills, knowledges and teaching methods in gymnastics, tumbling, combatives, and developmental activities.

PHA. 324.—Social Recreation. 3 credits.
12:50 Daily FLG 210 MILLAR, J.

Methods, materials and techniques of conducting social recreation programs. Planning and participating in social activities for groups of varying sizes and for different situations. The activities include progressive parties, quiet, and semi-active group games, stunts and contests, social mixers, outing events including hikes and picnics, and activities for special occasions, such as Thanksgiving, Halloween and Christmas.

PHA. 361.—Elementary School Health Program. 3 credits.
Section 1. 9:20 Daily FLG 208 SANDEFUR, W.
Section 2. 10:30 Daily FLG 208 SANDEFUR, W.
Section 3. 11:40 Daily FLG 208 DAMRON, C.

Principles of developing the health program with procedures for protecting and improving the health of the elementary school child through home-school-community resources and cooperation; health screening and follow-up; use of school plant and health services; selection and use of health instructional materials, records and reports in providing health experiences at various levels of the elementary school; integration and evaluation of health instruction.

PHA. 373.—Teaching Physical Education in the Elementary School. 3 credits.
Section 1. 8:10 Daily FLG 208 EDMONDSON, C.
Section 2. 9:20 Daily FLG 222 HICKS, D.
Section 3. 11:40 Daily FLG 222 PYE, R.

The program of physical education activities for the elementary school including small group play, large group play, directed play, rhythmic activities and team games, together with methods and procedures for conducting such a program.

PHA. 375.—Adapted Physical Education. 2 credits.
9:20 M T W Th Lab. to arr. FLG 210 SCOTT, T.

Instruction in methods of meeting the physical needs of children with certain physical defects. The problems involved in providing adapted sports programs for those with limited physical capacities.

PHA. 376.—First Aid and Injuries. 2 credits.
11:40 Daily FLG 210 VADHEIM, R.

Standards and accepted principals of first aid. Dressings and bandages, wounds and their care, artificial respiration, poisons, fractures and dislocations, burns, transportation of the injured, and other common emergencies.

PHA. 421.—Driver Education and Traffic Safety. 3 credits.
12:50 Daily FLG 206 DAMRON, C.

Prepares teachers to conduct driver education and training courses on the secondary school level. Methods and materials concerned with the psychophysical limitations of drivers, driving practices, automobile construction, manipulation and maintenance, pedestrian protection, road training, and skill tests.

PHA. 560.—Administration of School Health Programs. 3 credits.
11:40 Daily FLG 309 HICKS, D. Graduate major credit.

Fundamental policies and procedures in organizing, administering and coordinating a comprehensive school health program. Includes school responsibilities in health, with respect to: environment; planned educational experiences; appraisal, counseling, and other services; modified programs for exceptional children; emergency health conditions; in-service health education of teachers and health personnel. For school and community health workers, school administrators, supervisors and teachers.

GRADUATE COURSES

PHA. 605.—Research Methods in Physical Education, Health Education and Recreation. 3 credits.
9:20 Daily FLG 309 BOYD, C.

Elements and techniques of research and their application to problems in the fields of physical education, health education and recreation. The identification of the various research methods, familiarization with outstanding and significant research reports, evaluation of published research.

PHA. 615.—Supervision of Physical Education. 3 credits.
8:10 Daily FLG 309 STEVENS, B.

For those now employed or planning to become supervisors of state, county or city programs of physical education. Observational techniques, the evaluation and improvement of programs and teaching, standards for judging instruction, types of conferences, principles of curriculum construction, and administrative relationships.

PHA. 633.—Problems in Physical Education. 3 credits.
10:30 Daily FLG 309 BOYD, C.

Contemporary problems in physical education designed to broaden the student's understanding of principles and current practices as they relate to programs in this field.

PHYSICS

PS. 201.—General Physics. 3 credits. The first half of the course PS. 201-202. Prerequisite: C-21 and C-42.
(Register for the Demonstration Section, the Discussion Section, and for PS. 207)
Demonstration Section 1: 12:50 F BEN 203 SAWYER, E. M.
Discussion Section 11: 8:10 Daily BEN 210 TELLER, M. H.

General physics for science students.

PS. 202.—General Physics. 3 credits.
(Register for the Demonstration Section, the Discussion Section, and for PS. 208)
Demonstration Section 1: 11:40 Th BEN 203 SAWYER, E. M.
Discussion Section 11: 10:30 Daily BEN 210 SAWYER, E. M.

PS. 205.—General Physics. 3 credits. The first half of the course PS. 205-206. Prerequisites: MS. 105-106. Corequisite: MS. 353.
(Register for the Demonstration Section, the Discussion Section, and for PS. 207)
Demonstration Section 1: 12:50 F BEN 203 SAWYER, E. M.
Discussion Section 11: 8:10 Daily BEN 209 SAWYER, E. M.

Theory of mechanics, heat, sound, electricity and light. Primarily for engineering students.

PS. 206.—General Physics. 3 credits. Corequisite: MS. 354.
(Register for the Demonstration Section, the Discussion Section, and for PS. 208)
Demonstration Section 1: 11:40 Th BEN 203 SAWYER, E. M.
Discussion Section 11: 9:20 Daily BEN 209 FLOWERS, J. W.

PS. 207.—Laboratory For PS. 201 and PS. 205. 1 credit.
Section 111: 12:50-4:10 M W BEN 305 TELLER, M. H.
Section 112: 12:50-4:10 M W BEN 306 TELLER, M. H.
Section 113: 12:50-4:10 T Th BEN 305 TELLER, M. H.
Section 114: 12:50-4:10 T Th BEN 306 TELLER, M. H.

PS. 208.—Laboratory for PS. 202 and PS. 206. 1 credit.
Section 111: 12:50-4:10 M W BEN 303 TELLER, M. H.
Section 112: 12:50-4:10 M W BEN 304 TELLER, M. H.
Section 113: 12:50-4:10 T Th BEN 303 TELLER, M. H.
Section 114: 12:50-4:10 T Th BEN 304 TELLER, M. H.

PS. 314.—Advanced General Physics. 3 credits. Prerequisite: PS. 201-202.
11:40 Daily BEN 209 SWANSON, D. C.

Dynamics, optics, and Bohr theory of the atom. Designed to meet the needs of teachers and non-physics majors.

GRADUATE COURSES

PS. 603.—Theoretical Physics. 3 credits.
10:30 Daily BEN 209 GORDON, M. M.
Kinetic theory, thermodynamics and statistical mechanics.

PS. 610.—Theory of Electromagnetic Waves. 3 credits. Prerequisite: PS. 601-602.
9:20 Daily BEN 210 WILLIAMSON, R. C.
Electromagnetic waves, involving emission, transmission, the classical theory of dispersion, optical activity and polarization, reflection, refraction, interference and diffraction.

PS. 630.—Individual Work. Variable Credit.*
To arrange
Experiments on particular topics of physics, a review of classical experiments, or the development of an assigned experimental problem. The work will be assigned to meet the needs and interests of the particular student.

PS. 699.—Research and Thesis. 0 to 6 credits.*

PS. 799.—Research and Dissertation. 1 to 6 credits.*

PLANT PATHOLOGY

Prerequisites to any course in Plant Pathology are Botany 101-102. PT. 321 is prerequisite to courses in Plant Pathology except PT. 325, PT. 434 and PT. 634.

PT. 321.—Plant Pathology. 3 credits.
2:00 M W ROL 401 OWEN, J. H.
Laboratory: 3:10 M W and 2:00 to 4:10 T Th F ROL 501
Plant diseases caused by mechanical injury, enviromental factors, viruses, nematodes, parasitic bacteria, fungi and other plants and their economic importance; life cycles and role of parasitic fungi and bacteria; methods of control of plant disease.

ADVANCED UNDERGRADUATE AND GRADUATE COURSES

Prerequisites: (1) PT. 321 or equivalent. (2) Thirty semester hours in biological sciences, 15 of which should be in botany.

PT. 505.—History of Plant Pathology. 1 credit.
To arrange ROL 409 MULLER, A. S.
A correlation of recorded historical events and the trends and development of plant pathology as an exploration of our current knowledge of plant diseases.

PT. 506.—Plant Pathology Literature. 1 credit.
To arrange ROL 409 MULLER, A. S.
The knowledge of existing and available source material, current technical publications dealing with plant diseases and their evaluation as aids in conducting research.

PT. 507.—Plant Disease Collection. 2 credits.
To arrange MULLER, A. S.
The collection, identification, and preservation of plant diseases and fungi, stressing those of economic importance in Florida and those possessing distinctive taxonomic characteristics.

PT. 523.—Advanced Plant Pathology. 3 or 6 credits.*
To arrange OWEN, J. H.
A study of life histories of parasitic organisms in relation to the host plant, environmental factors influencing the development of diseases; all diseases of certain crop plants and specific diseases common to a wide variety of hosts.

GRADUATE COURSE

PT. 699.—Research and Thesis. 0 to 6 credits.*
To arrange OWEN, J. H.

*Credit assigned must be shown on course assignment card.

POLITICAL SCIENCE

PCL. 201.—American Federal Government. 3 credits.
(Register for one section only.)
Section 1. 7:00 Daily PEA 202 KOEN, R. Y.
Section 2. 8:10 Daily PEA 202 HAVARD, W. C.

Basic principles of the Federal Constitution. Political Parties and the electoral process. The machinery and functions of the federal government.

PCL. 202.—American State and Local Government. 3 credits.
9:20 Daily PEA 202 DOVELL, J. E.

State Constitutions, political parties, and politics. State Legislatures, courts, and chief executives. The functions of state governments. City and county government.

PCL. 209.—International Relations. 3 credits. Prerequisite: C-1 or equivalent.
10:30 Daily PEA 201 KOEN, R. Y.

The nature of international relations; nationalism, imperialism, militarism, armaments; history of international relations; foreign policies; function and problems of democracy; international organization; the United States.

PCL. 505.—History of Political Theory. 3 credits. Prerequisite: 6 hours of Political Science.
9:20 Daily PEA 201 DAUER, M. J.

Leading political theorists from Plato and Aristotle to Hobbes.

PCL. 508.—Comparative Government. 3 credits.
Prerequisite: 6 hours of Political Science.
10:30 Daily PEA 202 DIAMANT, A.

The government and politics of France, Italy, Germany, and the U. S. S. R.
Special emphasis on the historical, cultural, social, and economic determinants of current institutions and policies. Constitutions, parties, legislatures, executives, civil service systems, law, and local government. A comparative analysis of the theory and practice of modern totalitarianism.

PCL. 509.—American Foreign Policy. 3 credits. Prerequisite: PCL. 209-210 or HY. 245-246.
8:10 PEA 201 SVARLIEN, OSCAR

The United States in world affairs. Analysis of American foreign policy, past and present, in order to bring out the basic policies and the forces behind those policies.

GRADUATE COURSES

PCL. 625.—Seminar in Public Administration. 3 credits.
To arrange HAVARD, W. C.

A careful study of the methods of research in Public Administration and their application to such major problems in the field as personnel, fiscal organization, and planning.

PCL. 628.—Seminar in International Relations and Organization. 3 credits.
To arrange HARTMANN, F. H.

An analytical study of the institution and practice of diplomacy; international diplomatic conferences; the League of Nations and the United Nations; public international unions; basic problems of international organization including voting, sanctions, and collective security; world government.

PCL. 630.—Individual Work. 3 credits.
To arrange BARTLEY, E. R.

A reading or research course in such areas of Political Science as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

PCL. 699.—Research and Thesis. 0 to 6 credits.*

PCL. 799.—Research and Dissertation. 1 to 6 credits.*

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*Credit assigned must be shown on course assignment card.

PSYCHOLOGY

PSY. 201.—General Psychology. 3 credits.
(Register for one section only.)
Section 1 8:10 Daily ADM 207 BARRETT, A. M.
Section 2 9:20 Daily ADM 207 BARRETT, A. M.

The general topics in the field of psychology. Designed to provide an understanding of human behavior, approached as a natural phenomenom subject to scientific study. The unifying concept is the adaptation of the individual to his physical and social environment.

PSY. 206.—Psychology Applied to Business and Industry. 3 credits.
9:20 Daily E 102 KURTZ, A. K.

Application of the principles and methods of psychology to appropriate problems in business and industry. Studies in personnel selection, employment, job analysis, effect of conditions and methods of work on productivity. Psychological factors in advertising and selling.

PSY. 308.—Genetic Psychology. 3 credits. Prerequisite: PSY. 201.
9:20 Daily E 107 HORNE, E. P.

A consideration and interpretation of the experimental findings relating to the development of behavior. Phylogenetic as well as human ontogenetic development sequences will be considered.

PSY. 410.—Abnormal Psychology. 3 credits. Prerequisites: PSY. 201, 202.
8:10 Daily E 102 WUNDERLICH, H.

The principle abnormal phases of behavior, and the ways by means of which the individual develops abnormal habits of thinking and acting. A survey of the signs of beginning maladjustment and procedures which may be followed to correct these tendencies. Special attention is given to the prevention and treatment of mental disease.

PSY. 430.—Individual Work. 3 credits. Prerequisites: At least fifteen hours of psychology including PSY. 201, 301, 302, and permission of the Head of the Department.
To arrange

Qualified students and the instructor concerned may choose a particular problem for investigation or study from the various areas of experimental psychology. A formal written report of the work is required of the student.

PSY. 512.—Individual and Group Differences. 3 credits. Prerequisite: PSY. 201, 211.
11:40 Daily ADM 207 KURTZ, A. K.

An intensive study of individual and group differences essential to the evaluation of test results and vocational/educational adjustment. The influence of differences in intelligence, age, sex, and ethnic and cultural background on behavior.

PSY. 601.—Literature in Experimental Psychology. 3 credits.
8:10 Daily E 107 HORNE, E. P.

A consideration of experimental literature in selected areas of psychology.

PSY. 610.—Seminar in Psychopathology. 3 credits. Prerequisite: PSY. 410.
10:30 Daily E 102 WUNDERLICH, H.

Lectures, readings, and discussions of the various forms of mental disorder, with attention to causes, diagnosis, symptoms and treatment.

PSY. 612.—Methods in Clinical Psychology. 3 credits. Prerequisite: PSY. 503, 610.
10:30 Daily ADM 207 DIXON, J. C.

A survey of the basic concepts, methods, and procedures used in evaluating human personality, abilities, and behavior disorders. Case studies will be analyzed. Techniques of guidance and mental hygiene will be considered.

PSY. 630.—Individual Work. 3 credits.
To arrange

A reading or research course in such areas of Psychology as are needed by graduate students. May be elected for full credit in subsequent sessions with change of content.

PSY. 699.—Research and Thesis. 0 to 6 credits.*
To arrange.

PSY. 734.—Seminar in Current Clinical Literature. 3 credits.
11:40 Daily ADM 314 DIXON, J. C.

Students will be required to do extensive reading on selected topics in the area of clinical psychology.

PSY. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

REAL ESTATE

RE. 291.—Real Estate Fundamentals. 3 credits.
10:30 Daily MAT 108 DEHNER, A. H.

A survey of the real estate field with emphasis on the essentials that concern the consumer. The aim is to develop a full understanding of the significance of realty as a commodity and to equip the student with the fundamentals essential to successful home ownership. Classroom lectures and problems are further designed to provide a qualifying background for those seeking further training in real estate law, brokerage, management, appraising and real estate finance.

RE. 295.—Housing and Home Ownership. 3 credits.
8:10 Daily MAT 105 TRAVIS, R. W.

Concerned with the consumption of real estate and the economic, legal and technical aspects of housing from the point of view of the home owner. Stress is laid on the evolution and limitations of property rights, the role of government in the field of housing, principles of home ownership, home construction and design, and the vital problem of when and how to buy a home.

RE. 393.—Urban Land Utilization. 3 credits.
10:30 Daily MAT 105 TRAVIS, R. W.

Land and population; economics of land utilization; urbanization, and urban land; manufacturing as an urbanizing factor; labor as a factor; transportation and commerce in city location and urbanization.

RE. 493.—Real Estate Law. 3 credits.
8:10 Daily MAT 108 DEHNER, A. H.

Necessity of learning when to consult a lawyer; fixtures; easements; land descriptions; land titles and interests; deeds; mortgages; foreclosures; landlord and tenant; taxes and assessments; avoidance of "unauthorized practice of law."

GRADUATE COURSES

RE. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

Directed research and writing for the Master's degree, taken toward the end of the student's graduate program for credit in addition to the 24 hours required for the master's degree.

RE. 799—Research and Dissertation. 1 to 6 credits.*
To arrange

Directed research and writing for the Ph.D. degree, taken toward the end of the student's graduate program for credit in addition to the hours of regular courses required by the candidate's supervisory committee for the doctor's degree.

RELIGION

RN. 241.—Religious Foundations of Modern Life. 3 credits.
8:10 Daily I 110 McCOY, C. S.

A survey of religious ideals of western civilization.

RN. 341.—The Old Testament in the Light of Today. 3 credits.
9:20 Daily I 110 McCOY, C. S.

An inquiry into the literature of the Hebrews as reflected in the Bible.

RN. 430.—Individual Work. 3 credits.
McCOY, C. S.

A tutorial program designed to assist the student in writing a comprehensive essay on a topic which involves the correlation of religion with other areas of knowledge.

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SCHOOL ART

SCA. 253.—General Art for the Elementary Grades. 3 credits.
2:00-4:10 M W F YON 28 DAVIS, M. V.
Survey and practice of art work for grades one through six.

SCA. 301.—Creative School Art. 3 credits.
10:30-12:40 M W F YON 28 DAVIS, M. V.
Study and practice of creative art work suitable for children of different age levels.

SOCIAL STUDIES

SCL. 301.—Social Studies in the Elementary School. 3 credits.
9:20 Daily I 107 TISON, J. P.
Study of the selection, organization, planning, developing, and evaluating of experiences which help children become better citizens in a democracy. Exploration of the role of social studies and of other opportunities in the school curriculum for developing needed social learnings. Study of materials.

SCL. 302.—Social Studies in the Elementary School. 3 credits.
10.30 Daily I 107 GREEN, E. K.
Examination of content in the social studies field needed for the instruction of elementary children. Relationship of content in the field to the objectives of the elementary school. Emphasis on problems of in-service teachers.

SOCIOLOGY

SY. 201.—Sociological Foundations of Modern Life. 3 credits. Prerequisite: C-11 or equivalent.
8:10 Daily PEA 308 WEBBER, I. L.
Culture and its relations to specific social problems. The social institutions of American life today in relation to population changes, ethnic groups, and major problems of social policy. The social consequences of technological change. Techniques of social control in the metropolitan world.

SY. 246.—Crime and Society. 3 credits. Prerequisite: SY. 201.
10:30 Daily PEA 308 VEDDER, C. B.
Nature and causes of crime. Punishment, treatment, prevention of criminality. Sociological aspects of criminal law and procedure. Emphasis on current trends in criminality and its treatment.

SY. 321.—Rural Sociology. 3 credits. Prerequisite: SY. 201.
8:10 Daily PEA 309 SMITH, T. L.
American rural life in the changing regions. Trends in rural social resources and problems in the United States, the Southeast, Florida.

SY. 541.—History of Sociological Thought. 3 credits. Prerequisite: 6 hours of sociology, including SY. 201.
9:20 Daily PEA 309 MACLACHLAN, J. M.
The development of sociological thought. Sociological elements in ancient and medieval thought and sociological theories in the renaissance and the early modern period.

SY. 545.—The American Family. 3 credits. Prerequisite: 6 hours of sociology, including SY. 201.
10:30 Daily PEA 309 THOMASON, B.
A study of the cultural configuration of the American family with emphasis upon the interactional relationship between husband and wife and parent and child. These relationships will be examined in terms of theoretical and clinical considerations with a brief examination of diagnostic tools and techniques.

SY. 630.—Individual Work. 3 credits.
To arrange STAFF
Designed to permit graduate students to do work in subjects not available to them in currently offered courses.

SY. 699.—Research and Thesis. 0 to 6 credits.*

SY. 799.—Research and Dissertation. 1 to 6 credits.*
For students who are working for a doctor's degree in the area of Latin American Studies.

*Credit assigned must be shown on course assignment card.

SOILS

SLS. 301.—Soils. 3 credits. Prerequisites: CY. 109-110 or CY. 121-122.
8:10 M T W Th FLO 208 CALDWELL, R. E.
Laboratory: 2:00 to 4:10 M W FLO 202

The nature and properties of soils. A treatment of the fundamentals of soil science including genesis, morphology, classification, chemistry, biology, physics and moisture as related to plant growth.

SLS. 302.—Soil Fertility. 3 credits. Prerequisite: SLS. 301
9:20 M T W Th FLO 208 ROTHWELL, D. F.
Laboratory: 2:00 to 4:10 T Th FLO 202

General principles of soil fertility. The physical, chemical and biological factors affecting soil fertility and crop production. Studies on samples of soil from the home farm; commercial fertilizers, manures, green manures and organic matter maintenance, crop rotation and permanent soil fertility.

GRADUATE COURSES

SLS. 600.—Advanced Soils. 3 credits. Prerequisites: SLS. 302 and permission of Instructor.
To Arrange FLO 208 STAFF

Conferences, lectures, laboratory and problems in Soil Fertility and Management, Soil Chemistry and Microbiology, Soil Physics and Surveying and General Soils.

SLS. 650.—Conference in Soils. 1 to 4 credits.*
To arrange FLO 208 STAFF

Reports and discussions of published research in the following fields: A. Soil Physics; B. Soil Chemistry; C. Soil Microbiology; D. Soil Fertility.

SLS. 670.—Research in Soils. 1 to 6 credits.*
To arrange FLO 206 STAFF

SLS. 699.—Research and Thesis. 0 to 6 credits.*
To arrange STAFF

SLS. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange STAFF

SPANISH

SH. 133.—First-Year Spanish. 3 credits.
Lecture: 8:10 M T W Th AND 18 RYAN, J.
Laboratory: 10:30 Daily AND 11

SH. 134.—First-Year Spanish. 3 credits. Prerequisite: SH. 133 or the equivalent.
Lecture: 9:20 M T W Th AND 6
Laboratory: 10:30 Daily AND 11

SH. 201.—Second-Year Spanish. 3 credits. Prerequisite: SH 134 or the equivalent.
Lecture: 8:10 M T W Th AND 4 FERNANDEZ, P. V.
Laboratory: 10:30 Daily AND 11

SH. 202.—Second-Year Spanish. 3 credits. Prerequisite: SH. 201 or the equivalent.
Lecture: 9:20 M T W Th AND 4 HAYES, F. C.
Laboratory: 10:30 Daily AND 11

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SH. 430.—**Individual Work.** 3 credits. Prerequisite: 18 hours of college Spanish or the equivalent and permission of the department head.
To arrange AND 3-C

GRADUATE COURSES

SH. 630.—**Individual Work.** 3 credits.
To arrange AND 3-C

SH. 699.—**Research and Thesis.** 0 to 6 credits.*

SPEECH

SCH. 200.—**Voice and Diction.** 2 credits.
11:40 M T W Th ADM 206
Group and individual voice improvement.

SCH. 201.—**Effective Speaking.** 3 credits.
(Register for one section only.)
Section 1. 8:10 Daily ADM 206
Section 2. 9:20 Daily ADM 358
Section 3. 10:30 Daily ADM 206
Section 4. 11:40 Daily ADM 358
Demonstration and practice in effective speaking.

SCH. 309.—**Staging and Lighting.** 3 credits.
Prerequisite: SCH. 250.
11:40 Daily ADM 238
The designing, constructing, assembling and painting of scenery; lighting plans, instruments, controls and colors; special effects. Participation in plays.

SCH. 314.—**Types of Public Discussion.** 3 credits. Prerequisite: SCH. 201.
9:20 Daily ADM 206 EHNINGER, D.
Study and practice in the principles and methods of group discussion. Special attention given to problem-solving and conflict resolution.

SCH. 317.—**Correction of Speech Defects.** 3 credits.
Prerequisite: SCH. 201.
2:00 Daily ADM 206 BUCK, McK. W.
A beginning course in the recognition of common defects of articulation, dialect, nasality.

SCH. 320.—**Speech Training in Elementary School.** 3 credits. Prerequisite: SCH. 201 or experience as an elementary teacher.
12:50 Daily ADM 206 McCLELLAN, M. C.
Group procedures for the development of desirable speech habits in the child. Recognition of speech disorders.

COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

SCH. 519.—**Speech and Hearing.** 3 credits. Prerequisite: SCH. 415.
10:30 Daily ADM 358 TEW, R. E.
A study of the relationship between speech and hearing, the frequency of hearing losses and speech defects, the speech therapies for the hearing handicapped; elementary audiometry.

SCH. 531.—**The Teaching of Speech.** 3 credits. Open to seniors who have completed 9 semester hours of speech courses numbered 300 or above.
8:10 Daily ADM 239 CONSTANS, H. P.

The more important philosophies and systems of speech instruction of the past 100 years. Instruction, organization, and content of the basic and advanced courses in the speech curriculum.

*Credit assigned must be shown on course assignment card.

GRADUATE COURSES

SCH. 605.—Seminar in American Oratory. 3 credits.
11:40 Daily ADM 239 DICKEY, D. C.

Studies of the lives and speeches of noted American speakers with special reference to the changing character of compositional style and delivery. Particular attention will be paid to speeches on contemporary issues.

SCH. 616.—Seminar in Speech Research. 3 credits.
Prerequisite: Permission of Department Head.
12:50 Daily ADM 239 EHNINGER, D. W.

A lecture and project course in the more complex problems of speech.

SCH. 618.—Seminar in Clinical Administration. 3 credits.
8:10 Daily ADM 358 MASE, D. J.

An advanced course in the pathologies of speech, with emphasis on rehabilitative procedures, including the team concept of diagnosis and treatment and other matters pertaining to clinical organization.

SCH. 622.—Clinical Practice. 3 credits.
2:00 to 4:10 Daily ADM. 331 STAFF

Supervisory practice in clinical methods.

SCH. 630.—Individual Work. 3 credits.
To arrange

A project or research course in such areas of Speech as are needed by graduate students.

SCH. 699.—Research and Thesis. 0 to 6 credits.*
To arrange

SCH. 799.—Research and Dissertation. 1 to 6 credits.*
To arrange

VETERINARY SCIENCE

VY. 545.—Problems in Animal Parasitology. 4 to 8 credits.* Approved for Graduate credit. Prerequisites: BLY. 161, 162, 208, 209, and BCY. 300.
To arrange

GRADUATE COURSE

VY. 643.—Problems in Animal Pathology. 4 to 8 credits.* Prerequisite: Consult major professor.
To arrange

*Credit assigned must be shown on course assignment card.